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Original Communications.

ART. I.—*On the Pathology of Congenital Dislocation of the Head of the Femur on the Dorsum of the Ilium.*—(With plates.) By JOHN MURRAY CARNOCHAN, M. D., &c.

SOME time ago, I wrote an article which was inserted in the London Lancet of 21st September, 1844, containing remarks on the congenital luxations of the head of the femur, upon the dorsum of the ilium, together with some physiological comments on this interesting affection, and illustrated it with plates, taken from a living subject, delineating the peculiarities of this morbid condition, as observed during life. At the time that article was published, I had had no opportunity of dissecting any case of this nature, but having spent the following winter in studies at the dissecting rooms of the Ecole Pratique at Paris, I had the good fortune to meet with three cases, amongst the bodies brought into that institution for anatomical purposes. One of the subjects alluded to presented all the pathognomonic characters externally, appertaining to my case recorded in the Lancet of double luxation of the heads of both femurs upon the dorsum of the ilium. I select it, therefore, from the others; and at present shall relate the appearances I found in making the dissection of the various tissues surrounding, and in connection with, the ilio-femoral articulations, giving it as a pure and uncomplicated specimen of double congenital luxation of the ossa femorum, and looking upon it as signally elucidating the general pathological characters of this affection. To aid the description of the parts, I have had recourse to an admirably-executed drawing herewith annexed, of the pelvis, and the ligaments of the coxo-femoral articulation as seen immediately after the removal of the soft parts.

The subject from which the following description is taken, was a female, apparently between 60 and 70 years of age, and as observed

while lying on the table, it is seen to be somewhat emaciated, but this is most evident as regards the inferior extremities. The soft parts about the basin are flabby; a considerable disproportion between the size of the trunk and the length of the inferior extremities is remarkable, owing to the ascent of the heads of the femurs, upon the dorsa of the iliac bones. The head, thorax, and abdomen, present nothing abnormal while the body is in a recumbent position, but being placed in the erect attitude, the superior extremities appear too long for the trunk; the trunk itself appearing as it were wedged and sunk between the upper portion of the femurs. The thorax and abdomen, are thrown forward with a salient anterior curve, while the region of the loins, and the lower part of the dorsal vertebræ, present a curvature with a corresponding concavity. In this latter position, also, the anterior superior spinous processes of the ilia, are thrown forwards, while the lower part of the sacrum and coccyx take a direction upwards and backwards; the base of the sacrum being consequently tilted forwards and downwards. The cristæ of the iliac bones are almost vertical, and the trochanters can be felt standing out at a right angle to the external surface of the dorsum, nearly on a level with the posterior portion of the crests, and forming the apex of a conoid eminence, the base of which is at the ilium itself. The heads of both femurs enjoy free motion upon the dorsa of the iliac bones, and, while the trochanters can be pushed upwards and outwards, so as to be within half an inch of the crests of the ilia, when traction in the opposite direction is exerted, they are felt to descend through a space of nearly two inches, and become nearly on a level with a direct line drawn from the depressed anterior and superior spinous processes. The pelvis itself, with the exception of the unusual inclination of its axes, and the unnatural projection caused posteriorly by the abnormal position of the trochanters, appears to be, in other respects, tolerably well formed; the transverse diameter being, however, somewhat increased at the expense of the antero-posterior, but neither as regards the pelvis, nor the other osseous parts of the extremities or trunk, are there to be seen any evidences of a rachitic disposition. Between the anterior and spinous processes, there is a distance of eight inches; between the anterior superior spinous process and the tuberosity of the pubes, four inches and a half; while between the tuberosities of the ischia there is a space of five inches and three quarters, showing a considerably exaggerated diameter in this direction. The nearly equilateral triangle observed in the natural position of the parts, between the top of the trochanter, the tuberosity of the pubes, and the anterior superior spinous process of the ilium, is altogether changed, the measurements between these several points differing materially according as the head of the femur is pushed upwards, or drawn downwards upon the dorsum of the ilium. The play of motion which the head of the femur, must have had in the act of progression during life, may be said to have been about two inches, as that extent of change of position of the head of the bone can be obtained, by an alternating force applied to its shaft, of traction

downwards, or propulsion upwards. In the attempt to rotate, or move in different directions, the inferior extremity, a sensation of crepitus is felt, analogous to that produced by effusion or thickening of the ligamentous structure about an articulation, and the various motions can be effected with less facility than is generally observed in a healthy joint. Adduction and the action of flexing the thigh upon the pelvis, is less impeded than the other motions, but abduction, and extension, are permitted to a very limited extent.

As far as can be seen externally, the dislocation on both sides is exactly similar in every particular, and the two sides of the pelvis, in regard to the relations they bear, with the displaced head and trochanter of the femur, offer no perceptible variety. It will be seen by reference to the case already published by me in the Lancet, that the pathognomonic characters described, as belonging to the patient there alluded to, are perfectly analogous to those which claim our consideration in the present instance.

The external appearances, then, being in both cases, the one a facsimile of the other, it may reasonably be supposed that the deeper tissues, are also analogous. After these preliminary remarks, as regards the external characters or signs presented by the double congenital luxation of the head of the femur upon the dorsum ilii, we shall now describe the appearances met with upon dissection; first of the soft parts, and then in connection with the articular surfaces appertaining to the skeleton.

The skin occupying the region of the haunch is soft and flaccid, but in other respects presents nothing remarkable. The subcutaneous adipose cellular layer is dense and interspersed with pelotons of adipose tissue, which also are more condensed than usual. The aponeurosis covering the glutei is natural, but in attempting to remove this from the glutæus maximus, the fibres of this muscle are found to be so friable, that it is impossible to remove the investing fascia, without carrying along with it some of the degenerated muscular tissue. The first layer of muscles being exposed, consisting of the glutæus maximus, the anterior portion of the glutæus medius, and the upper portion of the semi-membranosus, semi-tendinosus and biceps, the general character of the muscular tissue is found to be much changed. These muscles are soft, flabby and pale, and have undergone, in many points, a partial conversion from the muscular into a kind of yellowish, fatty tissue. This is particularly to be observed with regard to the glutæus maximus and the anterior portion of the glutæus medius, but the other muscles participate more or less in the degeneration. The muscular fibres in regard to their length seem to have accommodated themselves to their altered position, and are found to be shorter than they ought to be, when the normal relation of the parts exists, and this can easily be understood when it is considered that the points of origin, and insertion are considerably approximated by the ascent of the head of the femur. The glutæus maximus being divided transversely through its middle, and the two portions reflected, an unusual quantity of adipocellular tissue is met with; enveloping the large nerves, arteries,

and veins situated beneath this muscle. By removing this loose tissue the deep-seated muscles are exposed, and are found to have undergone the same fatty degeneration as the more superficial layer, and the change or alteration in the direction of their fibres is particularly evident. Thus the quadratus femoris, obturator externus, gemelli and obturator internus, instead of passing transversely outwards as they generally do, assume a direction almost directly upwards, and but slightly outwards, to arrive at their point of insertion, at the root of the great trochanter. The pyriformis, which in the healthy subject is inclined downwards from its origin, has taken an inverse direction, and ascends upwards and outwards to reach its place of insertion at the digital fossa. In regarding the parts from above downwards, the glutæus medius, pyriformis and obturator internus, instead of resting upon the posterior portion of the cotyloid cavity, lie upon the partially-destroyed head of the femur and the posterior surface of the coxo-femoral ligament. The glutæus medius, the anterior fibres of which have become transverse, is pushed upwards towards the iliac crest, while the glutæus minimus is also shortened, and more fibrous than natural, particularly towards its insertion, where it becomes confounded with the capsular ligament.

Upon removing the tegumentary tissues from the anterior and upper part of the thigh, the femoro-pelvic muscles in that region are found to be shorter than natural, by the amount of the distance that the head of the femur has passed up beyond the cotyloid cavity. The same fatty degeneration and paleness of muscular tissue before alluded to, is found to pervade, more or less, the rectus, tensor vaginæ, femoris, and the belly of the iliacus internus. The sartorius and adductors present a more normal appearance of tissue, as does also the gracilis, which last is even somewhat hypertrophied. The psoas magnus taking its usual origin from the bodies and transverse processes of the last dorsal, and lumbar vertebræ, passes downwards and becomes tendinous about its middle. Where it passes over the brim of the pelvis and becomes mixed with the iliacus internus, a strong cord-like tendon results from the junction of these two muscles, which instead of passing downwards and outwards, to the usual point of insertion, hooks, as it were, over the margin of the pelvis, below the anterior inferior spinous process of the ilium, where it forms a deep groove; it then takes a course upwards, outwards and slightly backwards, to the extent of nearly three inches to gain the trochanter minor. It is important to bear in mind the reflected course of the tendon of the psoas magnus, as it accounts anatomically for the curvature forwards of the lumbar region, and also operates in conjunction with the shortened state of the adductors in materially impeding the abduction of the limb. From the continued friction to which the parts must have been subjected during life in the act of locomotion, a large bursa, extending in various directions, exists beneath the conjoined tendons of the psoas and iliacus, and the finger, when inserted into it, meets with an extensive cavity, which in the natural state would have been occupied

by the margin of the acetabulum and a portion of the head and neck of the femur, covered with the anterior part of the capsular ligament.

The arteries are much smaller than natural, and present a remarkably-tortuous disposition, not unlike the flexuosities of the vessels of the impregnated uterus. Thus, the main arterial trunk of the pelvis and inferior extremity, from the bifurcation of the aorta into the primitive iliacs to the place where the femoral artery perforates the tendinous sheath of the adductor magnus, presents a series of sinuosities bending in various directions; and this disposition is observed in the smaller branches, as well as in those also which spring from the internal iliacs to supply the parts on the glutæal region.

The veins corresponding to the arteries, if any difference exist, are larger than usual, and differ from the arteries in following a direct course, without presenting any irregular flexuosities.

The nervous centres in their structure present nothing abnormal in their individual parts, but they are considerably under the average size. The remains of a small bloody effusion (foyer sanguine) exists in the substance of the corpus striatum of the left side, and also another in the cerebellum near the corpus dentatum. The spinal marrow, except the diminution in volume just alluded to, appears generally natural, and the nerves forming the cauda equina, as also the sacral plexus, and the branches which take their origin from them, viz., obturatrix, gluteals, less and greater sciatics, &c., are below the normal size.

The ligamentous structure of the coxo-femoral articulation presents peculiarities and changes more remarkable than the other tissues already spoken of, and merits special attention as regards the possibility of effecting the reduction of this dislocation after a certain age, and the probability of maintaining the displaced articular surfaces in contact, should the attempt to reduce the dislocation be successful. The form and dimension of the capsular ligament have undergone a complete change, and in fact the disposition of the ancient capsule, and the parts it originally contained, have assumed altogether a new character, and abnormal relations with each other. The former ligamentous tissue itself has in some parts been replaced by a fatty structure, and has become thickened, or more attenuated in others.

It is not easy to describe by words the complex changes which the articular apparatus of the joint has undergone, but by a reference to the accompanying diagram, the description of the parts, as disclosed by dissection, will be better understood. Upon each side, the coxo-femoral articulation has become, as it were, furnished with two capsular ligaments, one which is the remains of the ancient capsule, and the other which is of more recent formation, and in which the head of the femur has been lodged since its escape from the original capsule. The old capsule, retaining its attachments at the margin of the acetabulum, has changed its usual direction, and is stretched upwards and outwards, in proportion as the head of the femur has mounted upon the dorsum ilii. The head of the bone

becoming independent of the acetabulum, and placed during the erect posture of the subject at the upper portion of the interior of the natural capsule, would naturally ascend and descend, during the act of locomotion, and remain within the original capsule until, in the progress of time, further changes occur. Owing to the weight of the body being now thrown chiefly on the capsular ligament, and the consequent pressure of the head of the femur against its upper portion, particularly during progression, it is reasonable to suppose that this part more especially, of the capsular ligament, would be subjected to material changes. This apparently has been the case. The head of the femur acting from below upon the superior and inner portion of the old capsule, while the weight of the body afforded the counter-resistance from above, this portion of the capsule, thus situated between the internal part of the head of the os femoris and the dorsum of the ilium, being continually subjected during the actions of locomotion to the influences of powerful traction and pressure between two hard bodies, gives way, either by rupture, or more probably has become, as it were, worn through (usé), by a species of progressive absorption. The perforation of the capsule being now accomplished, and the weight of the body still continuing to be thrown upon the inferior extremities, the head of the os femoris pressing in one direction and the superincumbent weight of the body in another, escapes at length through this perforation, and new becomes situated upon the dorsum of the ilium, in contact, superiorly and externally, with the deep surface of the glutæus minimus, and inferiorly with the upper surface of the old capsule; an annular portion of which remains attached around, and thus encircles the cervix femoris.

As happens in traumatic dislocations, the formation of a new capsule has followed the escape of the head of the femur, from the confines of its original receptacle. This new capsule which entirely surrounds the head of the femur in its new position, is of a fibro-ligamentous character, mixed in some points with a considerable quantity of yellowish, dense, adipose structure. It is inelastic, but from the length of its fibres, allows a free motion of the bone in every direction after the muscles have been removed. Internally, it is attached to the margin of an oval depression situated on the dorsum of the ilium in front of the ischiatic notch; externally, it has formed adhesions with the annular perforation in the ancient capsule through which the head of the bone has passed. The external surface of the capsule is generally surrounded by a cellulo-adipose tissue, but above, it is confounded with the fibrous structure of the deep surface of the gluteous minimus, and below, with the outer and superior part of the original capsule. The internal surface of the new capsular ligament is smooth and shining, studded in various points with numerous pediculated granular bodies of a yellowish adipose appearance, and at the lower and external portion, may be observed the perforation already mentioned, and which is seen to allow a free communication between the ancient capsule and that of more recent formation. Within the cavities of both

capsules, a considerable quantity of synovial liquid is found, which most probably has been secreted from the lining membrane of the original capsule.

The ligamentum teres, most likely after being ruptured or worn through, on account of the stretching it must have undergone by the displacement of the parts, has entirely disappeared, leaving no trace of its existence behind it, either at its attachment to the head of the femur, or at the bottom of the cotyloid cavity.

The head of the femur has changed its character in regard to its size, shape and consistence. Its dimensions are much smaller than natural, being at least one-third below the natural standard. The aspect upon which the round ligament is generally attached, is flattened and seems either to have never been developed in this direction, or to have been absorbed, or as it were worn down by the friction to which it must have been subjected upon the dorsum of the ilium during progression. This flattened aspect presents superficially a thin lamina of bone, which is entirely denuded of articular cartilage, and on the surface of which are seen numerous irregular elevations and depressions perforated with small foramina, as if the subjacent cancellated tissue had been encroached upon. The osseous tissue of what remains of the head of the femur is entirely altered. Instead of the spherical form and resisting tissue of the adult normal bone, the head of the femur in the subject before us presents an unshapely, stunted appearance, covered externally by a thin, friable osseous shell, which lies upon a spongy, cellular tissue of bone, so soft as to be easily crushed between the fingers, and incapable of resisting the pressure of a common writing quill. The articular cartilage exists, but in a very limited extent, and is seen to end abruptly in a greyish undulating line, leaving that portion of the head in contact with the dorsum of the ilium, as has already been mentioned, entirely bare. The neck of the femur is shorter and more slender than natural, and forms a right angle with the shaft of the bone, which arrangement, however, may in part be accounted for by the advanced age of the patient. The ancient acetabula present changes no less remarkable than the corresponding heads of the femurs which have escaped from them. Instead of the round cup-like cavity, there is seen a triangular depression, not more than half an inch in depth, and two and three-quarter inches in perimeter. The upper and inferior borders of this triangle are nearly equal in length, but the inner is shorter and presents an excurvation which is probably the remains of the notch, on the margin of the acetabulum, for the passage of the articular vessels into the joint. This notch is crossed by a transverse ligament which completes the border of the cavity, but the cotyloid ligament whose use in the natural state of the parts, is to deepen the acetabulum, exists but in a rudimentary degree. To the margin of the acetabulum thus constituted, is attached the pelvic portion of the old capsular ligament. The capsular ligament in its passage across the cotyloid cavity to be attached to the cervix femoris becomes immediately connected with the cellulo-adipose tissue which fills up that depres-

sion, still by reason of its distinct fibrous structure it can be distinctly traced to its attachments at the margin of the acetabulum. The bottom of the acetabulum is entirely ossified, showing no signs of an arrêt de développement. There is no remains of the ligamentum teres, and what fills up the cavity may be said to have a resemblance to the fatty mass usually situated at the bottom of the acetabulum, and which has received the name of the glands of Havers.

There is no new cavity formed for the head of the femur in its new position, as might be supposed, but on the dorsum of the ilium, in front of the upper part of the sciatic notch, there exists an oval depression, of about an eighth of an inch in depth at its centre, and which is excavated at the expense of the ilium. The head of the bone has played on this surface during life, and has probably determined this species of depression. The circumference of this depression receives the attachment of the new capsular ligament, the fibres of which extend in a radiating manner inwards, and becoming confounded with the periosteum, have the appearance of lining its floor, except at the centre, where the friction of the two bones against each other must have been greatest; there the osseous tissue is entirely denuded, and at this point the ilium appears to be almost perforated. It will be seen that there has been no attempt at the formation of a new socket by ossific effusion from the surface of the ilia, as generally takes place in those instances of traumatic dislocation which have not been reduced. This is particularly worthy of remark, as M. Jules Guérin, of Paris, has stated that the deposition of new bony material, and an effort to form a new acetabulum, was an invariable result in those cases of congenital luxation where the original capsular ligament had been ruptured or torn, so as to allow the head of the femur to escape, and it is upon this supposition, entirely erroneous, as proved by the case now under consideration, that he has deduced the principles of treatment he recommends for these congenital affections of the hip-joint. In another place, I shall allude more fully to this point.

These are the principal alterations which are found to have taken place in the soft tissues, and at the ancient and recent articulations, but the changes of form and dimension which the bones of the pelvis, taken collectively, have undergone, merit also consideration, especially in a therapeutic point of view, and in relation to the passage of the head of the child during parturition. After the description which has been given of the muscles and of their abnormal direction, it is not difficult to suppose that the diseased retraction, as well as their physiological action, and the superincumbent weight of the body, acting conjointly, would modify, more or less, the natural shape of the bones under these influences during the early periods of infancy, while the osseous tissue was yet not completely consolidated. Dupuytren has said, that the direction of the bones of the pelvis was not changed in the congenital dislocation of the hip-joint, but a slight examination of the pelvis, deprived of the soft parts investing it, is sufficient to show the inaccuracy of this statement, and in analyzing farther the changes which the parts have undergone,

most of the deviations in inclination, form and dimension, can in a great degree be referred to the abnormal direction in which the muscles have been obliged to act after the displacement of the head of the bone upon the dorsum of the ilium has taken place. By a glance at the accompanying diagram, it will be seen, that the pelvis generally is more slender in its construction, the osseous texture at the same time being less compact, owing probably to an original and continued diminution of nervous and vascular supply.

In comparing the denuded pelvis with that of the healthy female, the most prominent difference observed in a practical point of view is that between the upper and lower straits. In the pathological specimen we now treat of, the upper strait is found to be generally below the usual measurements both in the transverse and antero-posterior diameters, the latter, however, is proportionally much more contracted than the former. In a dried healthy female pelvis now before me, the transverse diameter is $5\frac{1}{4}$ inches, while in the morbid specimen it is $4\frac{7}{8}$ inches; the antero-posterior diameter in the natural specimen is $3\frac{7}{8}$ inches, in the other instance, it is only $2\frac{3}{4}$ inches.

The inferior strait in the morbid pelvis is still more anomalous. Between the apex of the coccyx, and the arch of the pubes, the measurement is $1\frac{7}{8}$ inches, against 4 inches in the healthy pelvis; while the distance between the tuberosities of the ischia, making up, as it were, for the small antero-posterior diameter, is $5\frac{3}{8}$ inches, the healthy pelvis in this direction being only $4\frac{1}{4}$ inches.

The wings of the ilia are smaller than natural, presenting angular prominences along the borders of the crests, and upon the dorsa are found the glenoid depressions already alluded to, where the heads of the femurs had played during life. Immediately below the anterior and inferior spinous process of the ilium on each side, the superficial groove in the healthy bone over which the conjoined tendons of the psoas magnus and iliacus internus passed, is converted into a semi-circular deep depression or gutter, giving a more than usually projecting appearance to the anterior inferior spine of the ilium. The descending rami of the pubes, and the ascending rami of the ossa ischia seem spread laterally and pass almost transversely outwards, giving to the arch of the pubes more of a semi-circular appearance than of an obtuse angle, as is observed in the natural condition of this part of the osseous structure. The long diameter of the foramina obturatoria instead of running nearly parallel with the body runs almost in a transverse direction.

The sacrum is somewhat stunted, showing a greater curvature upon its anterior aspect than in the natural bone, and at its junction with the vertebral column, the sacro-vertebral angle is seen to be more prominent than usual. The spinal column in the lower part of the dorsal and lumbar regions, presents anteriorly a remarkable convexity corresponding to the concavity seen in the loins during life.

Although the superincumbent weight of the body, and the original diseased retraction of the muscles have contributed materially to the production of the changes just alluded to in the direction of

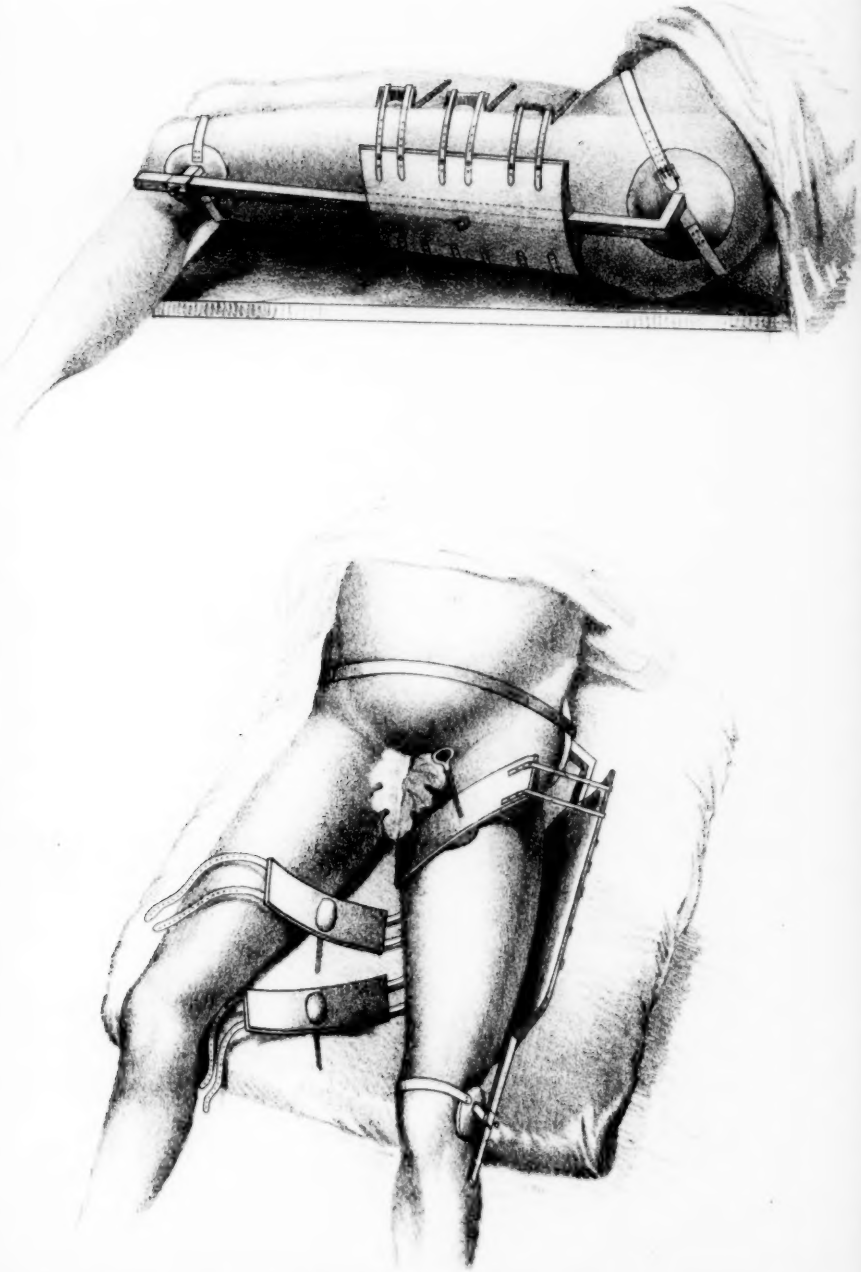
the bones, it is evident that the pelvi-trochanteric muscles, whose course and manner of action have become entirely altered from the relative change of position of their points of origin and insertion, after the heads of the femurs have been dislocated, and ascended on the dorsa of the ilia, must, in the ordinary performance of their functions, have aided somewhat in bringing about those deviations in direction and inclination, which the component parts of the pelvis have now assumed, so different from what is to be seen in one naturally constructed. The head of the femur having slipped upon the dorsum of the ilium, it is easy to suppose that in progression, the lower dorsal and lumbar vertebræ would be pulled forwards by the action of the psoas magnus, while the deep gutter observed on the brim of the pelvis below the anterior inferior spine of the ilium, is no doubt caused by the conjoined tendons of the psoas magnus and iliacus internus playing like a pulley in this depression; these muscles being almost continually in a state of tension, owing to the increased distance of the small trochanter, since the ascent of the femur upon the ilium. The same muscles will also, in acting on both sides, flatten or depress the brim of the pelvis, and thus the antero-posterior diameter is reduced; and in connection with the relaxed state of the glutæus maximus and medius, the iliacus internus by its contractions will tend to render the wing of the ilium more vertical. The psoas magnus through the medium of its connection with the lumbar vertebræ, tilting forward the base of the sacrum, and the conjoined tendons in their passage to their insertion pushing downwards and backwards the brim of the pelvis, conduce to change the axes of the pelvis, and to render nearly vertical, in the erect posture, the crests of the ilia. The increased transverse diameter of the inferior strait and the almost horizontal direction of the rami of the pubes, and of the ischia where they form the arch, as well as the outward direction and increased separation of the tuberosities of the ischia, can be accounted for by the perverted action of the quadratus femoris, the gemelli, the obturatores, and perhaps, the upper fibres of the adductor magnus.

These pathological details, apparently somewhat minute, are necessary to be understood, in relation to the reducibility and general therapeutics of the congenital dislocations of the coxo-femoral articulation, to which, in connection with the varieties they present, I may revert at another time.

ART. II.—*Case of Popliteal Aneurism Cured by Compression with a new Instrument.* (With a plate.) By A. E. HOSACK, M. D., P.

THE following case of popliteal aneurism, cured by compression, will be found interesting to the surgical profession in several points of view.

First, From the aneurism having recurred after the femoral artery had been taken up.



Dr A.E. Hosacks. Instrument for the treatment of Aneurism.

LITH. BY SARONY & MAJOR, FOR THE NEW YORK JOURNAL OF MEDICINE.

Secondly, From the fact of its being the first instance in the United States wherein a cure has been effected by compression.

Thirdly, From the compression being accomplished by the means of a new instrument.

In March, 1846, and in the presence of my friends, Doctors Wilkes and Jones, and several students of medicine, I tied the femoral artery at the lower part of the upper third of the thigh, for a popliteal aneurism in a colored man, named Isaac Wilkins, between fifty and sixty years of age. The aneurism, which had attained to the size of a small goose-egg, had existed between four and five months. Upon securing the artery in the ligature, all pulsation in the tumor ceased; the wound being dressed in the ordinary way, healed kindly in the usual time, casting off the ligature on the 26th day; after which the swelling continuing gradually to decline, left the patient to all appearance perfectly well, with the exception of a slight halt in his gait, which entirely disappeared after a few weeks. I heard nothing of him until about the middle of August following, when he again called upon me, saying that the disease had returned, which, upon examination, I ascertained to be the fact. The tumor had returned to nearly the size to which it had attained at the time of the operation, but had not the same elasticity, and was more solid to the feel; nevertheless, pulsation was distinctly to be perceived in the tumor, and could be detected in the femoral artery quite up to the point at which the ligature had been applied, as well as in the tibeal branches, but with diminished force.* Under these circumstances, I at once determined to make trial of the plan pursued by the surgeons in Dublin, that of compression; but not having the instrument used by them, or any distinct account of it at the time, I was left to my own resources, and contrived the one illustrated in the plate accompanying this communication. Preparatory to the application of my instrument, the patient was directed to remain quietly in bed for three or four days, which being complied with, the instrument was adjusted, and pressure exerted upon the femoral artery, so as to arrest completely all pulsation in the tumor; after an hour or more, it became necessary, in consequence of pain produced by pressure, to shift the pad an inch or more from the point just compressed, and so changed from time to time, as circumstances required; but having one plate or pad instead of three, (the other two being an addition of Dr. Rodgers, which certainly is an improvement,)

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* A case very similar to the above is related in the Lancet, by Sir A. Cooper, when the aneurism was reproduced after having been cured, as was supposed, by taking up of the femoral. The limb was afterwards amputated by Sir A. Cooper, who upon an examination of the parts, found that the femoral artery below the place of the ligature had been conveying blood. It does now and then happen, he remarks, that a blood-vessel will arise from the artery, close above the ligature, and pass into the femoral artery immediately below it, by which means the circulation is produced. Such cases, however, are extremely rare.

I was compelled to make compression upon the artery as it passes over the pubis, while changing the position of the pad. The instrument was thus continued until after the fifth day, when finding no pulsation in the tumor, it was removed. After the lapse of a fortnight or more, a slight thrill was to be detected in the aneurismal sac, when the instrument was re-applied for thirty-six hours longer, varying the pressure on the artery as circumstances required. Pulsation or thrill being no longer discoverable in the tumor, which had now become more solid, compression was taken off; since which time the patient has been able to take exercise, and attend to his usual occupation, being perfectly restored to health.

Gratified with the result of the foregoing case, and finding the instrument afterwards successful in the hands of Dr. Rodgers, I have been induced to publish an account of it; preparatory to which I examined the surgical records, with the view of ascertaining the various contrivances that had been used for the compression of arteries; when to my surprise I found detailed an account of an instrument similar in principle, but differing essentially in the mode of establishing pressure. It was the invention of Mr. Blizard, and was tried by him as early as 1802, but without success, when it was abandoned. I do not remember to have seen a notice of it before, if so, it had entirely escaped my recollection. I beg, however, to refer the reader to the 8th volume of the Medical and Physical Journal of London, where every thing relating to Mr. Blizard's case and instrument will be found.

The instrument used by me, consists (as it will be perceived by reference to the drawing) of a quadrangular rod of iron, passing up on the outside of the thigh to its full length, of sufficient strength to sustain the force required. At its upper extremity it is connected with a broad concave pad by a neck of iron, about an inch long, coming off at right angles with it. The pad is to rest upon the trochanter major, and is to be retained in its place by a strap passing round the pelvis. The lower extremity of the rod has a similar neck of iron, but which is two inches long and slides upon the rod, so as to accommodate the instrument to the various lengths of limbs; the pad connected with it is also broad and concave, that it may the better repose upon the outer condyle of the femur, and is retained in its place by a strap passing round the knee. Two plates of iron, six or seven inches broad and eight inches long, connected together, are threaded in the centre by the rod so as to slide up and down; to the upper and lower edge and on the outer side, knobs are attached for the fastening of straps to be connected with three plates of iron of sufficient thickness, about two inches and a half broad and six inches long. These plates have knobs at the upper and lower extremity on the outside, for straps to be attached connecting them with the outer plate. These three plates are pierced in the centre for a screw, which is to have connected with it a pad similar to the common tourniquet pad, only larger. The straps connecting the plates can be shortened or lenghened at pleasure, so as to bring the

pad of each to bear directly upon the femoral artery in its winding around the bone.*

By this arrangement it will be perceived that I have successfully avoided compressing the collateral branches of arteries by making the *point d'appui* between thet rochanter major and the outer condyle of the femur, while the resistance offered is alone from the inner side of the thigh bone, with the femoral artery intervening.†

Much has already been written of late upon the cure of aneurism by compression, by most of the leading surgeons of Dublin. It appears to have been revived by them, and adopted in practice in place of the ligature. An excellent and elaborate treatise has been published by Dr. Bellingham on this subject, from its earliest history down to the present time; he has also done ample justice to those claiming any agency in establishing this operation. It is not a little surprising that the French surgeons, after the success attendant upon compression in the cure of popliteal aneurism, as is evinced by the many cases reported by them in the different surgical works of France, should have allowed this operation to fall into disuse. I cannot but attribute it to a want of knowledge of the true pathology of the disease, or of the changes so necessary to take place in the aneurismal tumor to effect a cure.

For a minute detail of instruments and of the history of the treatment of aneurism by compression, as well as the true pathology of this disease, I must refer the reader to that excellent work, entitled Observations on Aneurism treated by Compression, published in London, by O'Bryen Bellingham, M. D., Edin.

ART. III.—*An Account of a severe Form of Epidemic Miliary Fever, which appeared at Fort Snelling, Upper Mississippi, in the Winter of* 1847–48. By GEORGE F. TURNER, M. D., Surgeon, U. S. Army.

FORT SNELLING, March 22d, 1848.

To the Editor of the New-York Journal of Medicine, &c.

DEAR SIR,—I have been induced to send you this imperfect sketch, from the belief that the severe form in which this epidemic has appeared is peculiar, and because very high authorities have denied the existence of miliary fever as a primary disease. I do not know that it will be of any interest to your readers.

During the past winter there has prevailed here, and in this vicinity, an epidemic miliaria of serious character, confined almost exclusively to children, which, so far as I know, is in many respects peculiar.

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* The instrument will have a less cumbersome appearance, and the plates be protected from rust, by having them covered by chamois or soft leather.

† This instrument is made by George Tiemann, Surgical Instrument Maker, No. 63 Chatham-street.

The first two cases occurred almost simultaneously, about the 20th December, 1847, in children of the same family, and proved rapidly fatal, and since that time the disease has moved slowly but steadily on, attacking family after family, till there now remain but few subjects for its visitation.

In its access it resembles the eruptive fevers generally; the leading symptoms being, in a majority of cases, vertigo, drowsiness, rigors alternating with flushings, pains in the back and lower extremities, great lassitude, coldness of the feet and hands, followed, generally in the course of twenty-four hours, by soreness of the throat, the inflammation usually beginning in the tonsils, which are early dotted by ulcerated points, the fauces soon becoming inflamed, and subsequently the mucous membrane of the nose. The tongue at this stage usually presents a peculiar appearance, as if rubbed with chalk; the papillæ showing above the white ground of a dark red hue, and the breath is now intolerably offensive. The febrile action, which is highly inflammatory, being now fully developed, the skin is hot and red, accompanied by a sense of pricking and itching which is sometimes excessive, and delirium is apt to be present, and in favorable cases the eruption, (attended by a general roughness of the surface, constituting cutis anserina,) begins to appear within forty-eight hours from the first indisposition. The eruption shows itself first on the loins, and extends gradually over the back and abdomen, and often over the entire surface; the face being the last to show the rash. It is distinctly vesicular, rendering the skin rough and of a deep red; disappearing on one part and appearing on another; the desquamation, in branny scales, commencing in favorable cases about the third day from its first appearance; though in many cases the eruption has re-appeared from time to time, not in the vesicular form, but merely showing beneath the cuticle, for three, four, and five weeks after the subsidence of the original disease. In one case a second eruption occurred three weeks after the disappearance of the first, closely resembling rubeola; the patches being interspersed with the weals of urticaria, and this was fatal, from the supervention of peritonitis on the sudden retrocession of the eruption.

An excessive eruption has not been as favorable as when less extensive, leaving one part to appear on another. The former cases have been attended by an increased degree of inflammation of the fauces and mucous membrane of the nose, and have been followed by more and severer sequelæ.

The most severe cases have been those where the eruption from the first has been barely visible, and where gastric irritability has been great.

With a few exceptions, bronchial symptoms have been slight, or altogether wanting.

In the most favorable cases convalescence has commenced about the seventh or eighth day, though few cases have progressed to perfect recovery without relapses from sequelæ more painful and serious than the original disease. In fact, this disease, (except where alarming symptoms have early appeared,) has not assumed its most

formidable character until after the eruptive stage has terminated. Convalescence has been tedious and uncertain; and enlargements of the parotid and cervical glands, otitis, with abscess within the ear, muscular pains resembling rheumatism, and anasarca, have formed the usual sequel. Of the forty-two cases which have come under my care, thirty-seven have been children under twelve years old, (and this number embraces nearly all the children in this immediate vicinity,) four were adult females, and one male. Six deaths have occurred thus far. One from laryngitis, one from meningitis, two from bronchitis, all rapidly fatal, (the eruption having never been fully developed, but only slightly perceptible, and that in a very limited extent,) and two from peritonitis, relapsed cases, after four or five weeks from the subsidence of the original eruption. Many cases which have recovered have been of a most serious character, and altogether the disease has been formidable. As to its mode of propagation, I cannot compare it with any epidemic I have seen. As a general rule, where it has entered a family, none of the children have escaped, but have all suffered within from three to six or seven days; though there have been a few striking exceptions. In one family, two children had the disease, and after an interval of seven weeks another took it, and then a fourth after the lapse of five weeks, and a fifth a few days subsequently; the remaining three having thus far escaped.

In this garrison, of eleven children occupying adjoining quarters on one side of the parade, ten were attacked, and not till six weeks after the last case, did the children on the opposite side begin to suffer.

The disease is probably, under favoring circumstances, slightly contagious. I have seen, in previous years, isolated cases, and its prevalence this season seems to depend on some inappreciable atmospheric peculiarity.

It has prevailed epidemically among the Sioux Indians of this vicinity while on their winter hunt, attacking indiscriminately all ages and sexes; but with them, from causes probably connected with their mode of life, it has been comparatively mild. In the memory of the oldest Indians, this epidemic has occurred amongst them twice before, and is peculiar to the cold months in this climate.

The treatment of this disease has been dictated by general principles. Emetics of ipecac., when not contra-indicated by gastric irritation, have proved of decided benefit, when given at the very onset, and subsequently mild cathartics through the whole course of the disease; though the persevering use of tepid sponging has been of more essential service than any other single remedy; allaying excessive heat of the skin, and general vascular excitement, obviating delirium and restlessness, and promoting sleep; thereby diminishing materially the risk of local congestions and inflammations; which have constituted the chief danger in recent cases.

Rooms highly heated by stoves, with imperfect ventilation, and too much bed covering, have proved in the highest degree perni-

cious during the eruptive stage; aggravating in a marked degree every serious tendency.

During the tedious and lingering convalescence, tonic, and alterant treatment has been indicated.

ART. IV.—*Cases of Pneumonia Typhoides; with Remarks on the Use of Acetate Plumbi, in this Affection.* By MOSES C. HASBROUCK, M. D., of Rockland Co., N. Y.

To the Editor of the New-York Journal of Medicine.

DEAR SIR,—I send you the notes of three cases of pneumonia typhoides, or of what I am in the habit of terming "asthenic pneumonia." They are intended to show the beneficial influence of acetate of lead, and if you deem them worthy of publication you will oblige me by giving them a place in your Journal.

Case 1st.—Mr. G. S., aged 38, of sanguine temperament and good constitution, after a day's ride, exposed to a cold and damp atmosphere, went to bed with a severe chill, violent headache, severe pain in the back and limbs, and soon after he became delirous. I saw him eight hours after the attack, and found him with a rapid and feeble pulse, constant delirium, and with the whole surface of his body and limbs bathed in perspiration. He was also expectorating profusely a sero-mucous fluid of a brick-dust color. His tongue was clean. His right side from the spine forwards, and the scapula and axilla downwards, to the border of the ribs, gave out minute crepitation. His bowels were loose.

℞. G. Opii, grs. iv.
Calomel, grs. viij.
Tar. Emetic, gr. j.
M. f. in Pulv. viij., one of these to be given every third hour.

These powders with slight modifications to suit occurring symptoms were continued until the morning of the third day, when it became evident that unless something was ordered to check the inordinate perspiration and expectoration, which still continued, the patient must sink. Bronchial breathing had taken the place of the crepitus, and the prostration was great. Acetate of lead was now given, combined with suitable doses of calomel and opium. In less than thirty-six hours, the perspiration and expectoration were reduced to an ordinary quantity; the pulse was below a hundred, and the delirium gone. Crepitant râle in right side returned. The gums had the blue border, and gave slight evidence of the action of calomel; convalescence was almost or quite established.

Case 2d.—Mrs. H., aged 45, of feeble constitution, had been frequently sick, and was at the time of the attack worn down by nursing. She was taken with a chill, followed by severe headache and

neuralgia, pains of the back and limbs, and a violent lancinating pain in the left side near the border of the ribs extending thence to the shoulder of the same side. She had a dry cough with trifling frothy expectoration, pulse 120 and feeble, tongue slightly coated white, and moist, skin hot and dry. Percussion clear and a perfectly natural, vesicular murmur. Two days after plueritis extended to the lungs proper; the pain abated and a brick-dust colored expectoration appeared. Uterine hemorrhage also set in, not profuse, but sufficient to increase rapidly the debility. To check this hemorrhage, rather than with a view to operate on the pulmonic inflammation, I gave acetate of lead, two grain doses, every four hours, united with calomel and opium, which she was taking. The next day the hemorrhage was less, but not entirely arrested, and all the other symptoms decidedly better; and what may be particularly mentioned, the skin was moist. The following day, slight effects of calomel and lead on the gums were evident; continuing the same medicine in diminished doses, convalescence was established, accompanied with a very sore mouth.

Observing the sudden effect of the lead here, and reflecting upon it, in connection with the case of Mr. G. S., I resolved to give it a trial in the next case which might occur, even should there be no excessive evacuation which it might be desirable to arrest; solely with a view to its alterative effect upon the capillary structure.

Case 3d.—Mr. P. W., a young man of good constitution, sent for me at 6 A. M., the 12th February last. He was taken the night before with a chill which lasted an hour, which was followed by heat and pain in the right side, near the border of the false ribs. He had complained of severe pain in the head also, but was now delirious. His pulse was 120 and feeble, tongue coated with a thick yellowish coat, and moist, skin hot and dry; he had vomitted a number of times and had frequent discharges from the bowels; coughed frequently without expectorating. His breathing was oppressed, his countenance contracted, eyes icterode and dull. Râle crepitans over the right latteral region of the chest.

℞ Tar. Emetic, gr. ss.
Sulph. Magnesia, ʒ ss.
Once in four hours.

The next day's report was, that he had not vomitted since he took the medicine, and his bowels had moved twice only. Delirium continued, pulse 110, and skin moist, slight dulness on percussion, and tubular breathing had taken the place of the crepitus. Same medicine continued.

14th. All was worse, constant delirium; the eyes had the peculiar typhoid stare; coughed little, expectorated nothing; pulse small and 130, skin dry.

℞ Calomel, gr. ss.
Pulv. Ipecac, and Opii, aā gr. ss.
Every four hours.

15th. No amendment.

℞. Calomel, gr. j.
Opii, gr. ¼.
Camphor, gr. ij.
Every two hours.

16th, 10 A. M. Still worse, no cough, rapid bronchial breathing of the "blowing kind," quite up to the scapula and clavicle. I now added to the last prescription two grains of lead, every two hours.

17th, 9 A. M. When I entered the room this morning, he looked up, and with a natural expression of countenance, and in a perfectly rational manner, jocosely asked me whether I was trying in how short a time I could treat a man to death. And he was sweating profusely, with pulse down to 100, and breathing comparatively easy. Cough had returned also, with a free expectoration.

On the 18th the gums were slightly affected, and a rapid convalescence followed.

We are aware that the recovery of three patients from attacks of severe inflammation during the use of acetate of lead, stated as a simple, isolated fact, can be of but little value. But if these cases, in their symptoms, all point to a certain pathological condition, state, or stage of disease, in which the ordinary remedies seemed to lack power to effect a favorable change, and which change seemed to be produced by lead; and if to this fact we can add a rational explanation, founded upon an analogous operation of lead in other diseases, we certainly go as far as three cases, under any circumstances, can enable us to go, in establishing a principle.

Those who are familiar with the "First Principles of Medicine, by Archibald Billings;" and, I should say, assent to his views of the nature of inflammation—that is, that the proximate cause of inflammation is a relaxation of the capillaries, and that sedatives, (antimony and neutral salts,) as well as alteratives, are absorbed, and thus brought in contact with these vessels, and through an operation on their nervous tissue, cause their contraction—will have but little difficulty in understanding the rationale of the operation of lead in low grades of inflammatory action. They will at once recognise, in the foregoing cases, an extreme relaxation of capillaries, (it was so great in the first two, that the fluids ran out, as it were, of their open extremities,) and they will at once impute the sudden and remarkable change to the well-known astringent properties of lead.

In acute sthenic pulmonic inflammation, the nervous system with its energy unimpaired, excites the heart to a vigorous action, which drives a full current of blood into the relaxed, but not yet entirely palsied capillaries, and becomes the efficient agent in keeping up, if not in producing, the disease. Hence, in the treatment of this inflammation, blood-letting is the first and principal remedy. In cases less sthenic, but yet not *asthenic*, we have less cardial and vascular action, with more injury of the nervous system; and hence with a slight bleeding, and perhaps without it, we call in immediately, and with more power, sedatives, (antimony and salts,) and promptly ob-

tain the same result, the relief of the distention of the minute vessels of the inflamed tissue. But again, in some cases of sthenic inflammation, whether highly or moderately sthenic, notwithstanding the use of venesection and other evacuants, antimony and salts, we fail in obtaining that relief to the extent which is sufficient to insure to the case a favorable result. In this situation we resort to the alterative (constringent) effects of calomel, and often combine it with opium to counteract its purgative quality, and also for the purpose of allaying the excitement of the nervous system. But calomel failing, the inflammation runs its course; and upon the extent of the destruction of parts, in relation to the remaining recuperative energy of the system, depends the farther continuance, or not, of life. Tonics and stimulants will sometimes assist the system in sustaining the shock, and in rallying, to the work of reparation, its prostrated energies.

In asthenic cases we have a great deterioration of the nervous power, and as a consequence an extreme relaxation of the capillaries; and as the heart acts feebly, there is no extra forcing of blood into them to arrest, and consequently no bleeding to be practised. A moderate evacuation of the bowels may relieve the nervous oppression and promote the absorption of medicines, and sedatives may have a limited application; but in so far as the main principle of treatment is concerned, we must commence, where, in the *asthenic*, very often convalescence is established; we must resort almost immediately to the constringent effect of calomel. And as effectual as this medicine is acknowledged by all to be in cases of acute inflammation, in which convalescence does not follow sufficient depletion; we yet all know that depletion must precede it, that it can effect nothing alteratively (constringently) so long as the heart pumps, with violence, blood into the inflamed tissue. And equally powerless is it in the extreme reverse condition of the system and circulation, in which not enough of nervous energy exists to impart to the tissue susceptibility to its action. As in the first its way must be prepared by depletion and sedatives, so in the last, or latter condition, tonics and sometimes stimulants must accompany it. But there is a point in the progress of inflammation, a little preceding that which calls for stimulation, just before there is that extreme prostration of the nervous influence which denies to the vessels power to contract under the operation of constringents, in which we feel that upon the alterative effect of calomel rests the life of the patient; and often at this time a diarrhœa sets in, and through it, or in absence of it, through some other cause, calomel lacks the power to insinuate itself into the circulation, or, insinuated, to produce its effect, and the patient continues to sink until nothing but the very small hope of stimulation is left. Such cases have frequently occurred to us in asthenic pneumomia; and in such, as the foregoing reports show, acetate of lead has seemed to afford us an efficient aid. Whether of itself it alters the condition of the inflamed part, or only enables calomel to do so, we cannot say, for we have not ventured to give it alone; but we have observed the blue tinge of the border of the gum to accompany from the commencement the mercurial influence.

Lead has in these cases undoubtedly a similar operation to what it has in hemorrhages and dysentery. So long as the hemorrhage is what we call active, that is, accompanied by excessive action of the heart and arteries, with heat of surface, &c., lead cannot arrest it permanently; the lancet and antimony are the proper means. But when the circulation is subdued, and the surface moist, it is very effective. Indeed it has appeared to us, that in cases in which excitement has been sufficiently subdued to allow it to act; but not enough to place the circulation below the standard of health, it has injured, by inducing a sub-inflammatory congestion (particularly in hæmoptysis) which has led to a rapid disorganization of the lungs.

On the other hand, in hemorrhages of a low passive character, not lead, but tonics are indicated, or the two combined. In extreme prostration from uterine draining, quinine and zinc united with stimulants will cut short cases which have resisted large and long-continued doses of lead.

In dysentery we are satisfied, from extensive observation, that it is the stage intermediate between high excitement and great prostration, in which it is useful. Given during high, or even moderate vascular excitement, it tends to increase pain, tormina and fever, and in great debility it is ineffectual. In the same stage of gastro-enterite, complicating, continued fever, it is highly useful; in excess of excitement and in collapse, injurious.

ART. V.—*Remarks on the Pathology of Epidemic Erysipelas.* By H. N. BENNETT, M. D., of Bethel, Conn.

To the Editor of the New-York Journal of Medicine, &c.,

DEAR SIR,—I wish to call your attention to, and obtain your *critique* upon a point of pathology to which I merely alluded in my article on epidemic erysipelas, in the May number of your Journal. No disease presents a greater variety of local lesions, and at the same time a more uniform train of general symptoms, than that to which I have just referred. In one case, we have a simple angina, preceded and accompanied by more or less constitutional disturbance; in another, the angina is complicated with erysipelas of the face; in a third, the previous local difficulties may be still farther complicated with diffuse cellular inflammation of a limb, with a meningitis, with a pleuritis, &c. So various are these lesions, that some writers have asserted that *every tissue* of the body is liable to be attacked. The multiform grouping of the different local inflammations in particular cases, proves most conclusively the identity of their nature, as well as the unity of their cause. The recent epidemic in this town presented numerous cases in which various groups of topical inflammations were manifest. So frequent was a succession and combination of structural lesions in the same case, that it was unsafe to make a favorable prognosis, except in the very mildest forms of the disease.

I intimated in the number of your Journal to which I have before alluded, the view which I entertain, explanatory of this great diversity of local lesion, viz: *that the areolar tissue is the primary seat of every true erysipelatous inflammation*, so that the disease might be emphatically termed *areolar fever*. Allow me briefly to illustrate this view. The cellular membrane is the most widely diffused of any of the tissues of the body, forming not only the envelope of all the organs, but serving also as the cement of their various parts, and filling up their interstices. This tissue, so widely diffused, is at the same time a continuous tissue, and its continuity is scarcely interrupted, being subject only to the circumstances of greater or less density according to the location which it occupies, or the office which it subserves. The sub-cutaneous cellular tissue is of loose texture, capable of great distension in various pathological conditions, while that which forms the envelop of the different muscular fasciculi, is condensed and possessed of a great degree of firmness. The membranes termed serous, are acknowledged to be but a mere modification, a condensed form of cellular tissue. The fascias, the peritoneum, the pleura, the cerebral and rachidian meninges, are a series of envelops, composed of the same anatomical elements. In a healthy state, they all secrete a fluid similar in physical properties and chemical composition. The areolar structure enters in large proportion into the *composition* of organs, so that they are not only surrounded by, but embedded in it, and it may be thus made not only to represent an atmosphere, as observed by Borden, but also a soil within which the viscera are implanted.

The hypothesis that this tissue is the primary anatomical seat of the local inflammations developed in the course of the disease termed epidemic erysipelas, or erysipelatous fever, readily accounts for the great topical diversity of these inflammations. Conceive that it is the areolar tissue for which the poison producing erysipelas has an elective affinity, and you are led at once to conceive also, every location for its morbid products. The submucous tissues of the throat, form the point of departure for erysipelatous angina; and this idea receives confirmation from the appearance of the fauces in certain cases in which the parts appear tumefied, pale and semi-transparent, the evident result of a serous effusion from the areolar tissue, and precisely similar to external œdematous erysipelas. The face is peculiarly liable to erysipelatous inflammation, and here the abundance of the cellular membrane is remarkable. In short, every portion of the body in which this tissue exists, is liable to be attacked by the disease. The skin and mucous membranes, into the composition of which the areolar structure enters largely, the serous membranes, the fascias, &c., &c., are alike liable to its invasion. Diffusion is a peculiar characteristic of erysipelatous inflammation, and the continuity of the cellular membrane is eminently adapted to this character. A cellular inflammation commencing in the axilla, rapidly extends over the whole trunk, an erysipelas commencing upon the nose, spreads rapidly over the whole head; is it not because the areolar tissue is the primary seat, nay, even the limit of the inflammatory process?

Give a little reflection to this idea, Mr. Editor, and see if it is merely a creature of the imagination. I am disposed to think that after due consideration, you will at least conclude with an old divine, (in reference, however, to a very different subject,) that, "it is not so sure there is nothing in it."

ART. VI.—*An Essay on the Nature and Curability of Heterologous Tumors.* By N. S. DAVIS, M. D.

IN a former number of this Journal, a variety of facts and statistics were presented, which appeared, to me at least, to show conclusively that heterologous tumors are, in all cases, the result of a previously-existing disturbed or unnatural condition of the system; in other words, that they are never, primarily, mere local diseases. And were it necessary, many other facts might be gathered from our medical literature, tending to corroborate the same inference. It may be said, however, that although scrofulous, tuberculous and typhous deposits are acknowledged to be *results* of constitutional causes, yet the fact that one-fifth or one-tenth (which I think nearer the truth) of the cases of cancer, are permanently cured by a removal of the local deposit or tumor, proves some cases, at least, to be strictly local in their character. But would it not be more in accordance with sound reasoning to infer that these exceptions, for such they must be regarded, are cases in which the primary cause, acting through the constitution, has ceased, while the effect only, in the form of the tumor, remains. That there are well-marked cases of carcinoma, in which the local disease progresses to a certain extent and then remains entirely stationary through an indefinite number of years, is well known. And they can be explained in no other way than by attributing them to some cause or causes, which having ceased to act, the local result or tumor ceases to progress. This view is also strongly corroborated by the statistics adduced in our last number. Thus, of 1172 patients affected with cancer and never operated on, 4½ per cent. lived over 20 years after the first appearance of the disease, and 20 per cent. more, from 6 to 20 years; while of 801 operated on in various ways, only 2¼ per cent. lived over 20 years, and 11 per cent. from 6 to 20 years. These facts not only show that such tumors may become fully developed, and that condition of the system which gave rise to them so far cease as to leave them stationary or very nearly so, but they militate very strongly against the idea that the constitutional symptoms arise secondarily from the absorption of cancerous matter by the capillaries connected with the local disease, and its mixture with the circulating fluids.

For if this were the case, such absorption and its constitutional effects ought to go on uniformly increasing so long as the tumor is suffered to remain. If it be granted that all heterologous tumors are the result of causes acting through the system, and not merely on the locality where the tumor appears, then a question of the highest practical importance presents itself for consideration, viz.: what are

the circumstances and conditions of the system which give rise to such morbid deposits? In discussing this subject, it must be constantly borne in mind, that the matter constituting the class of tumors in question, is not a simple degeneration or morbid alteration of the tissue or structure in which it makes its appearance; but a genuine deposit of new matter in a previously-healthy structure. Hence, it must proceed either from unnatural materials contained in the blood or nutritive fluid, which the organs of excretion fail to throw out of the system; or from a perverted action of the capillaries of the part in which the deposit appears, of such a character as to make, out of healthy blood, unnatural structures or deposits.

This latter supposition which makes the disease a strictly local one, I have already shown to be extremely improbable, and therefore the former is the only alternative left us. But the blood itself is only a product of the action of the digestive and respiratory organs on the materials supplied for nourishment; and a little reflection will satisfy the reader that it can be altered from the healthy standard in only three ways. First, by deficiency or fault in the action of some one or more of the organs which convert the nourishment into blood; second, by the direct absorption of noxious or indigestible materials; and third, by the failure of some one or more of the organs of excretion to separate from the blood those materials that have become either useless or hurtful in the system. Owing to the composition of the class of tumors under consideration, and the great variety of circumstances under which they occur, it can hardly be supposed that the second mode of altering the composition of the blood, has any part in their production. And if not, then we are permitted to limit our search after the primary link in the chain of morbid actions which result in the formation of these tumors to two sets of organs, viz.: those of digestion or sanguification and excretion.

If the first set of organs are affected, the proximate constituents of the blood may be imperfectly elaborated; if the latter, then those materials which naturally go to make up the various excretions, may be retained; and in either case the blood will necessarily deviate from that normal condition favorable to healthy nutrition, and present all the conditions necessary to the formation of unnatural deposits or tumors. If an attempt be made, however, to trace all the varieties of this class of tumors, or even all cases of any one variety, to primary disturbance in the action of one organ or set of organs, it will most likely fail. And for the simple reason that the condition of the blood essential to their formation, may arise from primary derangement either in an organ of assimilation or excretion, or both conjoined. Thus, by an imperfect digestion of food the blood may be charged with an unusual amount of carbon, for instance; and it is evident that the same state might result from a failure of the lungs or liver to separate the usual quantity of that substance, notwithstanding the digestion should be perfect.

It is now well known that dropsy is a mere symptom or result of diseased action; but the particular nature and seat of such disease may be very various. Hence we have diseases of the heart, liver, kid-

neys, spleen, serous membranes, &c., all giving rise to one common condition, viz., dropsy.

Precisely in the same light would I view all heterologous tumors or deposits. They are symptoms or effects of disordered action in some organ or organs, which directly or indirectly influences the condition or composition of the blood. And as these tumors differ from each other in their seat, their progress, their internal structure, and the period of life at which they generally appear, so do they doubtless arise from disordered action in different organs, and different degrees of derangement in the same organs. So well satisfied am I of the correctness of these views from the researches already made, that I do not believe another quarter of a century will pass away, before the appearance of a particular form of cancer will point the mind of the scientific physician to specific disorder in some particular organ or organs, with as much certainty as the appearance of the different varieties of dropsy now do. Until that time comes, their treatment must continue, as it has been for centuries, wholly empirical; and consequently unsuccessful.

If we look at the most accurate analysis of tuberculous and cancerous deposits, we shall readily perceive the analogy which exists in their composition and some of the natural tissues of the body. Thus, according to M. Theucht, of Strasbourg, 72 grains of a fully-developed scirrhus of the mamma, was composed of 2 grains of albumen, 20 of gelatine, 20 of fibrine, 10 of fluid fatty matter, and 20 of water and loss. The same author also found 72 grains of a scirrhus uterus to consist of 15 grains of gelatine, 10 of fibrine, 10 of oily or fatty matter, and 35 of water and loss. According to the recent analysis of Foy, scirrhus matter contains, albumen 42 per cent., fatty matter 8.25, fibrine 5.85, water 5, and small proportions of salts of lime, magnesia, soda, and potassa. The same author gives the composition of encephaloid as follows, viz.; albumen 47 per cent., fatty matter 12.85, osmazone 4, fibrine 6.50, water 8, and several salts in small proportions.

Analyses of several other authors might be adduced, but these are sufficient to show not only that the different varieties of these tumors differ from each other in composition, but also that different specimens of the same variety exhibit almost equal variations. These facts strongly corroborate the idea that the materials of which these tumors are composed, are derived from the blood; and also, that the morbid condition of this fluid may depend on a variety of functional disorders, corresponding with, and giving rise to, the variations in the composition of the morbid deposits. Thus the investigations of Phillips, as well as our own daily observations, leave us no room to doubt but that the condition of the blood which gives rise to scrofulous tumors, is directly dependent on errors or deficiencies either in the supply of nourishment or its assimilation by the digestive and pulmonary organs. But in most cases of carcinomatous disease, I think we have more reason to search for the primary link of morbid action in the organs of excretion than those of assimilation. Indeed, in regard to the first-mentioned disease, which almost always makes its appearance in childhood and youth, its origin in bad hygienic

management in reference to food, air and clothing, (when not traceable to a hereditary predisposition,) is so universally conceded, that no detailed proof need be adduced. Here there is no difficulty in tracing the order of morbid phenomena. The insufficient or unwholesome nourishment, the impoverished or deteriorated state of the blood, and the scrofulous deposits or enlarged glands, are phenomena so clearly bearing the relation of cause and effect as to leave no doubts on the reflecting mind. But the prevalence of two ideas which seem to me erroneous, have tended in no small degree to prevent that kind of investigation into the real pathology of carcinomatous and tuberculous deposits, which is so essential in order to obtain accurate and valuable results. The first consists in the supposition that these diseases originate in some profound and inveterate, but yet intangible and undefinable morbid condition of the constitution. Hence, instead of a rational search after the particular organ or organs whose derangement may have given rise to the imperfect assimilation or excretion and the consequent deposit, the most powerful remedies, such as the preparations of mercury, iodine, arsenic, &c., have been at once resorted to, under some vague notion of their possessing a specific power to change the morbid constitution. But what is meant by a morbid constitution, or a "constitutional disease," of which we so frequently hear, both in books and practice? Is it a well-defined, specific, tangible something; or is it one of the many phrases used to conceal our ignorance? By constitution, I suppose is meant the particular condition of the *tout ensemble* of our physical organization, including solids and fluids. And if so, a *constitutional* disease must be one that affects the whole organization. The animal system, however, has certain inlets and outlets, certain mediums or avenues through which alone impressions, both healthy and morbid, may be made on it.

Hence, it is evident, that a vitiated or diseased state of the constitution, subsequent to birth, can only be generated by the influence of some morbific agent or impression, acting through some of these avenues. Thus, if a child is supplied with insufficient or unwholesome food, its digestive apparatus is incapable of furnishing a sufficient quantity of healthy blood, consequently the whole system becomes debilitated, nutrition is inadequately maintained, and we have fully developed, a constitutional disease termed scrofula. Again, we may have the same result, from causes acting through an entirely different set of organs, viz: the skin and lungs; as when a child is exposed to the cold, damp, and vitiated air of cellars and ill-ventilated apartments. The same views are equally applicable to cancerous and tuberculous diseases. As has already been stated, the local disease or cause is but the result of a constitutional deviation from health; and this constitutional deviation is, again, the result of some morbific agent or impression acting on or through one or more of the organs of the system. Thus, as in scrofula, through the fault of the digestive and respiratory functions, the food may be imperfectly assimulated, and the whole mass of the circulating fluids thereby become vitiated. Or through the imperfect elaboration of urine, bile, catamenial fluid, &c.; materials may be left in the blood which give

rise to the same general deterioration of that fluid. And, again, the same general result may be obtained from deficient innervation, caused by long-continued depressing mental and moral emotions. Hence, it should be the first business of the pathologist, in every case of constitutional disease, whether it be scrofulous, cancerous, febrile, or what not, to determine through what set of organs or agencies the constitution became diseased; and also whether the same morbid influence is still at work, or whether it has ceased, leaving only its effects. With this knowledge, the indications of treatment become clear and rational; while without it all is blind empiricism. It seems to me that one prominent reason why no more well-defined and satisfactory results have been obtained in regard to the proximate causes, or in other words the real pathology of the diseases under consideration, is on account of the very natural and prevalent idea, that diseases of such obstinate and malignant character, must have their origin in some strongly-marked and inveterate morbid action, consequently all minor derangements or morbid influences in the system, are either entirely overlooked, or at once regarded as mere effects of the *local* disease on the constitution. But I think a little reflection will satisfy every intelligent member of the profession, that no idea could be more erroneous, or its effects more injurious to the welfare of the patient. To be fully satisfied of this, let us turn our attention a moment to the results of every day's observation. One man makes a meal of positively-indigestible food; another spends an evening in surfeiting and drunkenness; and both suffer in a few hours from well-marked derangement of the digestive organs. Again, one gets wet feet and suddenly checks his perspiration; another inhales the miasm of a malarious district, or the infected air of a crowded ship; and the first suffers an attack of inflammation, the other of fever. While no one expects the development of a scrofulous or carcinomatious swelling from such a cause. But if, instead of the meal of positively-indigestible food, or the suddenly-checked perspiration, or the miasmatic air, we give a child, day after day, insufficient or coarse and partially-digestible food, and make him sleep in a damp, half-ventillated and half-warmed cellar, what will be the result? Not a speedily developed fit of gastric irritation, an attack of pectoral inflammation, or a fever; but a slow and steadily-increasing impoverishment of the blood, a debilitated and cachectic condition of the whole system, and sooner or later the appearance of heterologous deposits in the form of scrofulous glands, carious bones, tuberculated viscera, or encephaloid tumors. Or, to take a less strongly-marked case, suppose the child, in addition to ordinary healthy food, air and clothing, is freely indulged in the daily use of sugar, candies, sweet-cakes, coffee, tea, &c., we shall have a still more slow and insidious, but scarcely less certain result. The appetite first becomes variable, the digestion imperfect, the blood gradually loaded with an amount of imperfectly-assimilated materials, which the excretory organs find it difficult to throw off; hence, a gradual accumulation takes place, until nature begins to deposit it in the cellular and glandular structures of the system, and now we have a scrofulous or carcinomatous disease. And yet the mother says, her child has never been sick; per-

haps has played or gone to school every day, and she knows no cause for the appearance of the local disease. We need not, however, confine our illustrations to the period of childhood, or to causes affecting principally the digestive organs.

We will take the young lady just entering the gay and fashionable circles of society. She follows the usual habit of confining the chest, whether by dress-linings and strong hooks or corsets and lacers, is immaterial; so that neither the natural quantity of oxygen can enter the blood or the necessary amount of carbonic acid be thrown off; hence an accumulation of carbonic acid takes place during the day, which is only partially counteracted by the free and unrestrained respiration during the hours of sleep. Consequently we have not only a slow accumulation of an extremely-deleterious material, but also an inadequate supply of oxygen, which leaves the tone of the nervous system impaired; the organic actions become languid, the feeling of youthful health and vigor diminishes; the lips grow pale, the ruddy glow gradually fades from the cheeks; soon a hacking cough appears with every change of the weather; and finally, before the meridian of life, she goes to the grave—another victim to tubercular phthisis. And yet the cause is attributed, perhaps, to some great grandmother, who may have died from the same disease half a century previous. Or, to take a case still less familiar, we will select a healthy female in the meridian of life, subject her to the loss of friends or children, or tie her to a vicious, drunken husband; in a word, place her in circumstances where she will be constantly under the influence of depressing mental emotions and anxiety, the tone and energy of the nervous system becomes impaired, all the organs feel the loss of proper innervation; consequently the processes of assimilation and nutrition become languid and imperfect, the liver and intestines become torpid in their functions; perhaps the catamenial discharge begins to vacillate or ceases entirely, and now a scirrhus tumor is discovered in the breast or uterus. I have extended these illustrations, drawn from actual observation, perhaps to a tedious length, solely for the purpose of impressing on the mind of the reader, the following all important truths, viz.: 1st. That all *heterologous* tumors are only effects or results of constitutional derangement. 2d. That this constitutional disorder is itself also a result of the influence of morbific agents or impressions, acting on or through some organ or set of organs in the system, whose action is capable of affecting, either directly or indirectly, the condition of the blood. 3d. That the only mode of arriving at the true, and practically valuable pathology of this class of diseases, is to study them in their connection with this primary link in the chain of morbid action. 4th. That while acute diseases are the results of sudden and strong morbid impressions, to which they can easily be traced; chronic diseases, and especially tumors, arise from slight, and sometimes scarcely-appreciable, but *long-continued* or *oft-repeated* impressions, requiring much study and a vigilant observation to trace them successfully in practice. The reader will find abundant evidence, confirmatory of this last proposition, in Phillips' valuable work on Scrofula, and in MacIlwain on Tumors.

(To be continued.)

ART. VII.—*A Case of Strangulated Inguinal Hernia, attended with Sloughing of the Intestine—Cure.* By ALEXANDER EWING, M. D., of Dexter, Michigan.

DURING the evening of the 27th of Nov., 1847, I was requested to visit Col. Solomon Peterson, (3½ miles from town,) aged 58 years, of very intemperate habits. Was told that "a hernia, of which he had been the subject for 40 years, was down, and had baffled all the colonel's endeavors to reduce."

On reaching the case, I found a very large mass of intestines occupying the scrotum, which was distended to the size of an infant's head. I learned from the attendants that "the colonel had been on a visit to Pinckney, a village about 10 miles distant, and becoming quite intoxicated, had ridden home over a very rough road, with this great mass of intestines 'down.'"

I found the tumor quite red, and tender to the touch, as during the three previous days, (it having been down that length of time,) the patient had made repeated efforts to reduce it.

I immediately made use of the taxis, which I continued for about 20 minutes, without success. I then administered ant. tart., in a quantity sufficient to produce nausea, and again tried the taxis, which I kept up for an hour and a half, frequently urging the necessity of bleeding, warm bath, tobacco injections, &c.; but he "turned a deaf ear" to all entreaties to allow me to use any further means for its reduction, until the following morning.

Nov. 28th. Visited my patient, accompanied by Drs. Millman, Hollywood, and Clarke. Tumor presented much the same appearance as upon the previous evening, but the tenderness was felt more or less all over the abdomen, with nausea and inclination to vomit, accompanied with hiccough, restlessness—pulse low and languid.

Under this state of things no time was to be lost. We at once made known "our hopes and fears" to the patient, who now willingly consented to any measures we saw fit to propose. Accordingly, we had him placed upon the table, and the operation commenced in the usual manner, but which was rendered somewhat difficult by the very great size of the tumor, which formed nearly a right angle with the abdomen, and could be depressed but little, on account of the great tenderness and tension of the parts. We also found an unusual thickness (perhaps two inches) of dense adipose substance under the superficial fascia, which was undoubtedly rendered so thick (and almost cartilaginous) by the long-continued use of a *poor truss*. The only artery divided was the superficial epigastric, which was immediately secured.

The sac being reached and opened, about half a pint of serous fluid of the most offensive character, made its escape, accompanied with a hissing sound. Having made a division of the stricture, we now commenced to return the gut, which presented a dark, mottled appearance in places, whilst in others it resembled very much in color the substance of the liver, overspread with fibrine. Added to this was

that characteristic *dead feel* which we always observe in gangrenous parts. I do not wish to be understood to say, that this mortified condition of the gut extended throughout the whole extent of the protruding portion, but was confined to portions of from one to five inches in length, but not always entirely encircling the gut. But so completely was the integrity of the bowel destroyed, that notwithstanding our most cautious endeavors to restore them to their natural cavity in an unbroken state, we failed, for as the bowel was gently forced up from the scrotum, by an assistant, they would give way under the tips of my fingers in directing them up through the canal, although I used little or no force, knowing their tender state.

But what was now to be done? Of course we all considered the case pretty much if not entirely hopeless, as the bowels were evidently mortified throughout quite a portion of their extent, whilst in smaller portions gangrene really existed. As in several places their coats were broken, and in one place there was a rupture of about 2½ inches in length; out of all of these the fæces was oozing. We now emptied the bowels of a portion of their contents on a towel, through the largest opening, to the amount of half a pint or more. At this stage of the operation there was still a large portion of the hernial tumor unreduced, which, in its present state, it would be madness to return into the cavity of the abdomen. We therefore concluded that it would be best to make a very free division of the stricture above, and also to carry the bistoury down over the pubis into the scrotum, and make a free division of the parts toward the surface, so that, by entirely removing the pressure from the bowels, there might be no obstruction whatever to the free circulation through the parts, and therefore give the best possible chance for their restoration.

Our reasons for not completing the reduction must be evident to every reader, as had we done so the contents of the bowels would have been poured out into the cavity of the abdomen, which would have been likely to have proved fatal in its consequences. And although I am ready to admit that their natural cavity possesses restorative powers beyond most other means, yet I question whether or not the position in which we left the bowels, with a wall of support on every side, (formed as will be presently seen,) enabling them to resist the pressure of their contents, etc., was not paramount to the evils which might follow from keeping them in their present position.

Having succeeded in making a very free division of the stricture, I now introduced my finger down into the scrotum, and turning the bistoury flatways, directed it over my finger until I carried it beyond the parts which were compressing the hernial tumor, when I turned the edge upwards and made a free division of the parts; thus leaving the bowels unconfined throughout their whole extent.

I now brought the ruptured portion in contact with the external wound, which was now brought together in the usual manner, but leaving room for the fæces to escape with freedom.

I should mention that very old and extensive adhesions existed between a portion of the gut and the floor of the inguinal canal.

The patient was now placed upon his bed, and an anodyne administered, with directions to give him whiskey and water in moderate quantities, as he was now very weak, with a small, irritable pulse. (Whiskey was in this case ordered, from the fact that he was in the daily habit of using, his neighbors say, about one quart per diem.)

Nov. 29th. Slept some during the night; has taken some beef-tea and water-gruel; pulse 130, small and irregular; countenance exhibits a very haggard and anxious appearance; no hiccough since the operation; delirium, with incessant muttering about "Mexico and Gen. Taylor"; wound presents a blackened appearance, with the excrement constantly oozing from it, of a dark greenish-yellow color, and exceedingly offensive.

I will not trouble your readers with a detailed account of this case from this time, but will simply note the most important items in the progress and after-treatment of the case.

For several days the pulse ranged from 120 to 140. Tongue dry, and covered with a brownish coat, except the tip and edges, which were red and fiery; some tenderness and tympanites of the bowels. Fæces constantly oozing from the wound until about the fourth day, when we succeeded in getting a passage per ano. After the third day, extensive suppuration was established, accompanied with sloughing of the wound. After the sixth day, the fæces ceased to ooze at the wound, and by the use of gentle laxatives we found no difficulty in keeping up a regular action of the bowels. We allowed the patient whiskey and water in (for him) moderate quantities, with the free use of beef-tea, chicken-broth, water-gruel, etc., etc.

About the sixth day, the patient complained of pain in the scrotum, which continued for about four days, (with redness and swelling, accompanied with more or less febrile action). At the end of this time an opening was made into the scrotum, and about six ounces of pus was discharged; on the following day nearly an equal quantity made its escape. All tenderness of the bowels having some days since subsided, the pulse now became quite regular. Healthy granulations began to shoot forth from the edges of the wound.

On the 13th day from the operation, a piece of whitish-looking substance was found projecting from the wound; on taking hold of it, I found that it offered little or no resistance; I consequently drew it out. It was about six inches in length by three or four inches wide; and was undoubtedly the remains of the hernial sack which had sloughed off.

From this time the patient continued to improve rapidly until about the 8th of January, at which time the wound had entirely healed, but from the first of January he was able to be "about the house" a good share of the time.

As soon as the state of the parts would admit, I commenced gradually to return the bowels, and supporting them by a properly-adjusted suspensory bandage. In this I succeeded to my entire satisfaction, as by the first of January I had so far reduced them as to have the whole mass up out of the scrotum. But on account of the old and extensive adhesions, which existed throughout the course of the canal, it was impossible to make a complete reduction; but the

canal was enlarged to such an extent that no difficulty or annoyance whatever is experienced by the patient, who is now attending to his usual business, and enjoying better health than he has for a year or two previous.

The parts over the pubis have entirely reunited; so that I have no fear of anything like strangulation taking place in future. In fact, to all intents and purposes, a radical cure has been produced.

It must be evident to all, (taking the circumstances of the case into consideration,) that to have attempted a separation of the adhesions, in the then-existing state of the gut, would have proved imminently hazardous to the patient.

[Whilst reading the proof-sheet of the foregoing article, the New-Orleans Medical and Surgical Journal for May has come to hand, containing a condensed account of the same. The account published in our cotemporary was (it appears) derived from a private letter sent to a Mr. Sears. This much we are compelled to say, in justice to the author and ourselves.—Ed. *N. Y. Jour. Med.*]

PART SECOND.

Critical Analysis.

Art. VIII.—*Practical Observations on certain Diseases of the Chest, and on the Principles of Auscultation.* By **Peyton Blakiston**, M. D., F. R. S.; Fellow of the Royal College of Physicians, &c. &c., pp. 384, Phila.: Lea & Blanchard, 1848.

We always welcome with pleasure an addition to the collection of facts in our profession, when these facts are derived, as in the work before us, from cases carefully examined during life, by one familiar with his subject, and as minutely inspected after death. Such cases, reported so as to exhibit their prominent features, and not embarrassed by tedious and unnecessary details, are valuable for reference, and often afford great assistance where general rules alone would be an insufficient guide to diagnosis and treatment.

The work rests for its practical character, on 122 recorded cases, in almost every one of which, as our author informs us, the symptoms during life were witnessed and noted down by him, and in the fatal cases, he was either present at the examination of the body, or inspected the parts after their removal, and hence is responsible for their accuracy.

It commences with a chapter on the properties of Sound, the want of a correct knowledge of which and of the laws of its transmission doubtless embarrasses many when commencing the study of auscultation and percussion.

We have next a full account of the sounds elicited by percussion of the thorax, both in health and disease, and also of the sounds of the respiration and voice, and of the heart, by auscultation, with the explanation of these sounds by different writers, and a chapter on the practice of auscultation, containing most that is valuable of a general nature.

We quote his view of the systolic sound of the heart. "*The systolic sound of the heart is caused by the friction of the muscular fibres of the ventricles* inter se, *and the tightening of the auriculo-ventricular valves; strengthened in certain cases, by the impulse of the heart against the ribs, and by the collision of the blood against the orifices of the aorta and pulmonary artery.*" (p. 64.)

We then have between 80 and 90 pages on the formation, termination, causes, and treatment of thoracic aneurism, with upwards of twenty cases, constituting a most valuable part of the work.

He recognises the three principal forms of aneurism of the thoracic aorta, generally admitted, the *dilated*, the *sacculated*, and the *mixed*, though he thinks that many pure cases of the sacculated form have been mistaken for the last mentioned, and that these are not of such common occurrence as some have supposed.

Thoracic aneurism generally proves fatal either by the escape of blood through a perforation of its walls, or from pressure on some vital part near it. Its progress, however, Dr B. remarks is influenced by its *situation*, *the state of its walls*, and *the nature of its contents*, the effect of each of which is illustrated by remarks as well as by cases.

The only *proximate causes* of aneurism are diminution of elasticity and loss of substance of the inner coats of the artery. As it is proved that increase in the force with which the blood is impelled into the artery by the heart cannot produce this effect, this diminution of elasticity and loss of substance can only result from a morbid alteration of the arterial coats, or a total or partial displacement of their proper substance, by matter possessing less elasticity and cohesion. Such alterations are constantly resulting from a deposition of *horny patches*, *atheroma*, and *calcareous concretions*. These *horny patches*, Dr. B. considers as imperfectly-organized false membranes, deposited on the free surface of the inner coats of arteries. They are not found in all cases of aneurism. *Atheroma* is of a brownish-yellow color, and of a consistence varying from that of pus to cheese or boiled white of eggs, and sometimes still firmer, originating between the middle and inner coats, and in the substance of the latter. Its changes resemble very much those of tubercle. When it softens, it produces ulceration of the middle membrane, followed by rupture or destruction of the inner coat. This is constantly found in aneurisms, and is the most constant proximate cause of them. The *calcareous concretions* are composed principally of phosphate, with some carbonate of lime.

Dr. B. remarks, that "in the present state of our knowledge, we can go no farther than to infer that the deposition of atheroma is a process of abnormal nutrition, depending on a peculiar state of the constitution, which may be denominated the atheromatous diathesis"

Thoracic aneurism prevails especially between the ages of 40 and 50 years, and occurs only in one female to nine males, showing a marked difference against the male sex.

As to the *constitutional* causes of atheroma, all circumstances which materially interfere with digestion and assimilation *may* produce the atheromatous diathesis, but these same circumstances also give rise to scrofula, tuberculosis, &c. &c.

In the *diagnosis* of thoracic aneurism, the following are the results of the careful analysis of thirty-seven cases by our author.

"No diagnostic sign was furnished by the character of the pulse, or by the presence of pulsation above or below the clavicles.

"When a pulsation was seen and felt on a prominent spot in the chest, it indicated the presence of sacculated or mixed aneurism.

"Purring thrill was only valuable as a sign of aneurism, in conjunction with other signs.

"A systolic murmur, heard at a distance from the heart, even

though it were not heard at the precordial region, only afforded evidence of the existence of aneurism when it was combined with other signs denoting the existence of a circumscribed tumor.

"A double or diastolic murmur, confined to one spot, at a distance from the precordial region, denoted the existence of a sacculated aneurism.

"When a hollow murmur was heard, a dilated aneurism was present.

"The intensity of aneurismal murmur was in a great measure proportioned to the force of the heart's action.

"Aneurism of both kinds existed without the slightest trace of pulsation or murmur.

"Aneurisms arising within the sac of the pericardium were not indicated during life-time by any characteristic signs." (p. 159.)

In the *treatment* of thoracic aneurism whenever formed, the objects in view are,

1. The prevention of the increase or rupture of a dilated aneurism.

2. The obliteration of a sacculated aneurism, by the deposition of a fibrinous clot within it.

The treatment of *dilated* and of *sacculated* or *mixed* aneurism must be considered separately.

In dilated aneurism, the only alternative that remains is the diminution of the force of the current of blood, and this is accomplished by lessening the amount of blood in the circulation, by reducing the action of the heart by low diet, sedative and purgative drugs, and mental and bodily repose. Caution is necessary in venesection, and also in an extremely low diet, and an immoderate use of purgatives. The use of digitalis requires great caution from the danger of syncope. Dr. B. had long abandoned its general use in such cases, having found poppy and hyoscyamus much more safe in their action. He thinks more favorably of the extract of belladonna, rubbed over the precordial region, than of any other article for tranquillizing the heart's action.

In sacculated and mixed aneurism, the only object is to promote coagulation in the sac by means which will also strengthen its walls and diminish their elasticity. This is to be accomplished by means of sedatives, purgatives, and chalybeates, mental and bodily rest, and the application of cold to the external tumor. Dr. B. has generally given iron in the form of tincture of sesquichloride, with hyoscyamus.

Sometimes the application of cold is so intensely painful that it cannot be borne, and then a cold conium poultice may be used.

We next have a long and valuable chapter on the progress and termination of chronic heart diseases, abundantly illustrated by cases, with a minute account of the morbid changes which take place both in the walls of that organ and in its orifices, and of the effects of such changes. We must refer to the work itself for anything more on this branch of the subject than the following general conclusions of our author from the facts detailed by him in the chapter.

1. A considerable amount of obstruction may exist at the aortic orifice of the heart, without seriously affecting the general health.

2. Mitral regurgitation is one of the most direct and frequent causes of pulmonary venous congestion.

3. Tricuspid regurgitation is the most direct and almost *constant* cause of that engorgement of the vessels of the general circulation, and its consequences, which originate with the heart.

4. Except in conjunction with regurgitation through the auriculo-ventricular orifices, hypertrophy of the ventricles in many cases rather assists the circulation than promotes congestion.

In the *diagnosis* of chronic diseases of the heart, the first point to be determined is, whether the symptoms depend upon *organic* or *inorganic* causes. We must remember, also, that both sets of causes may operate at the same time. When organic changes are found to exist, the nature of such changes must be determined; whether the contractile power of the heart, or its valvular apparatus, or both, are affected; and, if the contractile power be affected, whether it is increased or diminished. For the diagnostic marks of these different states, we must refer to the work itself, extracting only the following signs of valvular derangements.

Aortic orifice. *Obstruction.*—Systolic murmur traced up the course of the aorta, sometimes very prolonged.

Regurgitation.—Diastolic murmur running up the aorta, visible arterial pulsations.

Mitral orifice. *Obstruction.*—Sometimes diastolic murmur at the apex of the heart and at the lower angle of the left scapula, not up the aorta—without visible arterial pulsations. Pulmonary obstruction.

Regurgitation.—Sometimes, but not often, systolic murmur, heard at the apex of the heart, and at the lower angle of the left scapula. Occasionally undulations between the second and third left ribs. Pulmonary obstruction.

Tricuspid orifice. *Regurgitation.*—Seldom any murmur. Venous pulsations of the neck. Obstruction of the general circulation.

Dr. B. remarks, that the great seat or amount of valvular derangement cannot always be determined, and that the chief endeavor of practical men will be to determine, if organic disease of the heart is present, whether its contractile power is increased or decreased, or whether either or both of the circulations which result from it are obstructed.

In hypertrophy of the ventricles, whether with or without dilatation, Dr. B. much prefers small bleedings, or cups and leeches to the precordial region, to free venesection recommended by Laennec, with sedatives and rest—indeed, abstraction of blood is seldom necessary at all, if the patient is kept free from mental and bodily disturbance. As a sedative, digitalis is the most powerful, and the tincture is preferable to the infusion, which acts more as a diuretic. But as this article is often uncertain, and sometimes produces dangerous effects, he prefers poppy, hyoscyamus, and conium. Local anodyne friction, particularly with belladonna liniment, or opium ointment, has seemed to him to afford more relief than any medicine administered internally. The douche, or regular cold sponging on the head, may be used to prevent the cerebral congestion, which is sometimes promoted by this state of the heart.

When the action of the heart is enfeebled, generous diet, with mental repose, and exercise which shall invigorate without fatiguing, is indicated, and sometimes the sesquichloride of iron, with hyoscyamus, is a valuable remedy.

When pulmonary obstruction is present, if there are both hypertrophy and disease of the valves of the left side of the heart, it is important to know whether the changes of the valves are such as give rise to mitral regurgitation or not, the existence of which must modify the treatment. Expectorants, with the occasional application of leeches or cups between the shoulders, and open blisters on the chest, constitute the leading means of treatment, with the addition of tonics, when the action of the heart is feeble.

When there are symptoms of general obstruction, diuretics must be added to the other means. Acupuncturation will often afford great relief for a time, but must be used with caution on account of the danger of gangrene.

We have next a chapter on circumscribed pleurisy, followed by one on chronic pleurisy, both illustrated by cases, the latter affection being one which is very apt to be overlooked, from the general symptoms being often so very slight at first, and from their great resemblance to those of phthisis pulmonalis in other cases.

The treatment in chronic pleurisy depends on the stage of the disease, and the state of the patient. In a great majority of the recent cases, mild iodine and mercurial frictions were employed, with opium, if there were any pain, and cream of tartar freely given as a drink. If this treatment failed, blisters were applied, and the surface dressed with mild mercurial ointment, and stronger diuretics given. Light, nutritious food was always ordered, and mineral tonics speedily resorted to.

In cases still more advanced, large blisters were applied at first, and strong mercurial frictions employed, and it was generally necessary to support the patient with beef-tea and tonics. The existence of fever did not contra-indicate these means, as it was rather increased than diminished by them.

Of acute *pneumonia*, our author recognises two forms, one of which is produced by congestion and inflammatory swelling of the vessels, and the other by deposition of lymph, the *serous* and the *sero-plastic;* to them he adds a third form, the *plastic*, in which lymph is deposited with little or no fluid, and this, he says, may be looked for in two varieties, in an *aggregated* and a *disseminated* form.

In the treatment of pneumonia, he prefers that by tartarized antimony, and says that, with certain modifications in individual cases, it is suitable to every form and stage of primary pneumonia.

The remaining sixty or seventy pages of the work are devoted to the subject of phthisis pulmonalis, and contain remarks on its nature, development and causes, for which we must refer to the work itself. There is also a chapter on the termination of this disease, with cases of its arrest and of restoration to health, after the formation and subsequent healing of a tubercular cavity in the lungs. We have also some interesting cases of acute phthisis, those cases in which life is destroyed within eight or nine weeks, by the development of

tubercular and gray granulations in the lungs, without the formation of cavities. Such cases are rare, and our author has only seen twenty of them. Of these twenty, seven occurred between the ages of 6 and 10, two between 10 and 20, eight between 20 and 30, two between 30 and 40, and one about 70.

In the *treatment* of phthisis pulmonalis, Dr. B. thought proper to test *naphtha* and *cod-liver oil*, by trying each in one hundred cases, and from the experience thus furnished says, that naphtha has not been found either a specific remedy for phthisis, or one of any great value. Having found such beneficial, and as he says, unlooked-for results, from the use of cod-liver oil, he continues to use it, and to watch its effects, and adds that, although this article is not a specific remedy for phthisis, its exhibition has been found useful in certain cases when combined with a judicious system of regimen and diet. Dr. B. considers the grand principle on which to proceed in our endeavors to arrest the progress of phthisis pulmonalis to be the *union of tonic and sedative remedies.* This is a principle to which both the antiphlogistic and the expectant plans of treatment are opposed, which he thinks are both contra-indicated by the nature and known causes of the disease.

Our author's remarks on the *prevention* of the disease, are judicious and worthy of attention, as are also those on its removal and palliation, though but brief, as are also those on the management of the complications which occur during the course of the disease, to which he has added nothing new.

The work of Dr. B. truly deserves the title of "practical," which he has given it, and embodies the experience of one who has evidently studied his subject with care, and constitutes a valuable addition to our knowledge of the diseases of which it treats. H. D. B.

ART. IX.—*On the Causes and Treatment of Abortion and Sterility; being the Results of an Extended Inquiry into the Physiological and Morbid Condition of the Uterus, with Reference especially to Leucorrhœal Affections and the Diseases of Menstruation.* By JAMES WHITEHEAD, F. R. C. S., Surgeon to the Manchester and Salford Lying-in Hospital, 8vo. pp. 368. Philadelphia: Lea & Blanchard. 1848.

PERHAPS there are no subjects more deserving of the attention of the general practitioner than those mentioned in the title of the work given above—no diseases, the treatment of which proves more unsatisfactory to both physician and patient.

A treatise embracing "the results of an extended inquiry" into this subject, if properly handled, should be received with mingled feelings of gratitude and pleasure. How far the work before us has these claims upon the profession, we proceed now to ascertain.

Mr. W. commences his work by an introduction of nine pages, in which he alludes to the progress made in the physiology of reproduction within the last few years—to the increased facilities offered

for the study of organic diseases of the uterus, and to the description and application of a new instrument which he has named the "*prolapsus tube*, or diseased uterus tube." Immediately after this comes his observations (chapter 1st,) on menstruation. In this chapter, the physiology of this most important function to the female economy is brought before the reader. It is upon this subject volumes have been written singularly crude and contradictory in their character. And it would be equally strange if there were not found views and doctrines that at the present time may be looked upon as scarcely (to say the least) settled. Passing over that portion of the chapter in which Mr. W. treats of the "*Signs of Puberty*," "*Periodicity of Menstruation*," and "*Quantity of the Blood thrown off at each Menstrual Period*," we come to that portion in which he treats of "*Properties of the Menstrual Blood.*" On this subject, much discussion has recently appeared. Many of our more modern physiologists believing that it differs in its sensible properties from healthy systemic blood in the fact of a slightly less quantity of fibrin, while others consider it completely deprived of fibrin, and that its want of coagulation depends upon this fact, or the presence of an acid. Mr. W., under this head does not commit himself—he however declaims, and that too, we think, with great justice, against the practice of placing so much confidence upon the chemical and microscopical analysis of portions of retained menses. Upon this subject he says:

"The analyses hitherto published on the properties of the menstrual blood have evidently been made upon the discharge in is crude state, largely mixed with another organic product of a very different nature: they might indeed with equal propriety be considered as analysis of the vaginal mucus (which during the catamenial periods, is secreted in increased quantity,) combined with a certain proportion, sometimes more, sometimes less, of the *true* catamenial fluid."

Under the heading of the "*Nature of the Vaginal Mucus*," he remarks, "The mucus of the vagina in its normal state always exhibits acid properties; that of the uterus is constantly alkaline." It is well known that ordinary menstrual fluid does not coagulate. Our author believes this is owing to the presence of the acid found in the vaginal mucus. In relation to this, he says:

"It is the mixture of this acid product with the true catamenial fluid in its transit outwards, which gives to the latter the peculiar properties by which it is generally said to be characterized."

This opinion is a slight modification of that of M. Retzius, who believed "that it was owing to the presence of phosphoric and lactic acids." The nature of the true menstrual blood he believes to differ from that discharged from the vagina. His mode of obtaining the fluid free from vaginal secretions is as follows:

"For the purposes of examination, it may be procured by means of the speculum, care being taken always to remove, by the aid of a piece of lint or sponge held between the blades of a sponge-holder, all the secretion from about the *os* and *cervix uteri*. This must be done immediately after the instrument shall have been properly adjusted, and will be found necessary in order that the fluid may be free from admixture with that exuding from the surrounding surfaces."

When thus collected, it has been found to possess the following properties.

"1st. It is never so dark in color as ordinary menstrual blood, so called, nor always so florid as that of the arteries; its color, however, seems to vary slightly, being, at certain times, rather more florid than at others. This difference of shade which the fluid exhibits at the moment of its exudation, is attended by no corresponding change in its appearance subsequently, after being incorporated with the vaginal mucus; the effect of this latter product upon venous and arterial blood being very nearly the same. 2dly. Its consistence cannot be ascertained in every instance, as it does not always flow in a continued stream, unseparated. When collected in its *entire* state, it appears rather more viscid than the systemic blood, owing probably to its slow exudation. 3dly. When thus collected, it invariably coagulates, the separation of the clot from the serum being sufficiently distinct in three or four minutes: the smallness of the quantity may account for the short time required for the accomplishment of this change. 4thly. It sometimes passes off in a continued stream as pure blood. More frequently it is observed to escape from the *os uteri*, partly in form of a thin, colored serum, and partly in flattened clots, of the size of small orange-seeds, which, soon after their escape, become broken down and dissolved, as it were, in the vaginal mucus, escaping at the *ostium externum* in the usual uncoagulable fluid form. 5thly. It is invariably alkaline, quickly changing the turmeric paper to a reddish-brown color, and the litmus to a decided blue.

"Examined under the microscope it appears to be a very simple product, consisting chiefly of a number of blood corpuscles floating in a limpid, almost colorless fluid. The corpuscles are generally observed to be in greater abundance in this than in healthy systemic blood, and perhaps less clustered together in groups, and more equally distributed. There are often also a few white globules, larger in size than the blood discs, spherical, and nucleated, and a number of very minute granules similar to oil granules, highly refractive; and sometimes, but not always, here and there a scale of epithelium, which, there is little doubt, becomes entangled in the fluid as it passes off, being furnished probably by the mucous surface about the orifice of the uterus. At least such scales do not properly belong to the true menstrual fluid, as it is occasionally observed to be entirely free from them."

The nature of the ordinary menstrual blood, as collected from the vagina, was found to possess the following characteristics:

"1st. The acid nature of the fluid was unequivocal in every instance, but with varying degrees of intensity. 2dly. Its color was similar to that of healthy venous blood drawn from the smaller vessels, and never so florid as that of the arteries; it was always less viscid than either. 3dly. It did not coagulate. In some instances, however, when the discharge, from over-exertion, mental anxiety, or confinement to a heated atmosphere, became unusually profuse, clots were not unfrequently noticed among the secretion, and these had always an alkaline reaction.

"Under the microscope it presented a considerable number of blood corpuscles aggregated in linear or irregular groups, and floating in a pale, pinkish serum; these corpuscles, in the course of a few minutes after the removal of the fluid from the vaginal surface, appeared to diminish in number, some undergoing at the same time a change in their form and size: it occasionally contained a few lymph globules, and generally a number of small granular bodies like oil globules. It always contained, moreover, a great quantity of epithelium scales of different shapes and sizes."

The reader will easily see how different the physical properties of the two are, and the difference will no doubt account in part for

the differences of opinion as given by writers. That the true menstrual fluid does contain fibrin he has no doubt, and that it is probable that the relative quantity of this constituent in the fluid under consideration, is not different from that which obtains in the circulating fluid in its healthy condition. Mr. W. sums up his remarks as follows:

"The following observations and experiments furnish additional arguments in favor of the near approximation, if not the identity, in their leading characters, of the systemic and the *true* menstrual blood as it issues from the parts which secrete it; and tend strongly to prove, moreover, that the properties which are said to characterize *common* men trual blood—namely, its want of power to clot, attributed to the absence of fibrin, its acid reaction, and its peculiar color and consistence—are altogether acquired, and variously modified, by admixture with the vaginal mucus after the fluid has escaped from the uterine vessels."

"It appears then from what has now been stated, that the true menstrual blood, uncombined with any other product, is extremely like the circulating mass; consisting of the same elemental constituents, and observing the same habits under like circumstances. And, escaping from the uterus in the separated form before described, the small clots are immediately dissolved in the vaginal mucus, being thus enabled to pass off in an uninterrupted stream."

Whilst reading these remarks of our author, we were reminded of similar views put forth, nearly a quarter of a century since, by an American physician of no mean repute, and one, of whose claims to originality in this matter there can be no doubt.* On the subject of coagulation of the menstrual blood, he says: "We believe that menstrual blood does coagulate, and that when it does not, the fact is explained with facility without resorting to the aid of secretion." Again, "our own opinion is that natural menstruation is an active hemorrhage; that the discharge is blood, and of course that, like all other blood it will coagulate." We are exceedingly pleased to have this opportunity to show, that our British brethren, occasionally at least, are indebted to us for opinions which they claim for their own. We have as a profession in this country, been accused of having no views of our own, but if we mistake not, there are many similar instances not unlike the present, which would tell sadly for the want of (to say the least,) common courtesy in "our brethren across the great water," and which, we hope at some day, not far off, to see clearly presented to the profession.

In regard to those cases of reported menstruation during pregnancy, Mr. W., says:

"I have met with a considerable number of instances of what appeared to be natural menstruation during pregnancy and the nursing period, wherein the crude fluid collected from the *ostium externum* was precisely similar, as

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* Vide New-York Medical and Physical Journal, Vol. IV. 1825, p. 52. The article is entitled, "*Remarks* on *Menstruation: being an attempt to show that the generally-received doctrines, on this subject, are not only untrue, but inadequate to explain some of the most interesting phenomena connected with this subject.* By James R. Manly, M. D., President of the Medical Society of the State of New-York."

believed by the patient herself, and so far as I was able to ascertain by careful examination, to that discharged under normal circumstances. On examining these cases with the speculum during the existence of menstrual phenomena, the blood was invariably found issuing from diseased surfaces situated upon or about the *labia uteri*, none escaping from the interior of the organ."

The "source of the menstrual secretion," has long been a matter of dispute. Some have believed it to proceed from the mucous membrane of the vagina, others from the cervix uteri, and others still from the mucous membrane of the cavity of the uterus. Mr. W. is of the latter opinion, and to use his own expression, "has witnessed in numerous instances, the menstrual blood issue, from the *os uteri*, the *labia*, *cervix* and all the vaginal surface being perfectly normal, and furnishing no such product." Under this head our author takes up the subject of the periodic maturation, and discharge of ova, as connected with the phenomena of menstruation. From a careful review of this portion of his work, it would appear that he believes "that rupture of the ovisacs, and discharge of ova, are generally observed at this period; although the two are not necessarily co-existent," how Mr. W. can reconcile this with a previous expression of his and recorded facts, it is difficult to say, viz: "That the ovaries perform an important office in connection with menstruation, is evident from the fact that in cases where these organs are wanting, or where they have been removed by operation or destroyed by disease, the function is never discharged."

Now it is well ascertained that the specific function of the ovaries, is the maturation of the ova, this fact at the present time, few if any will dispute; that they are not discharged from the ovarium, until the period of puberty, the repeated and careful observations of many observers have fully settled. (We are fully aware that Dr. Ritchie, of Glasgow, believes to the contrary, but he stands alone in his belief, and as many think without one well-authenticated fact to confirm him.) This view of the case taken by our author as cited above is opposed to facts as revealed in repeated *post-mortem* examinations of persons dying in the act of menstruation. A large number of cases of this character have already been reported in American and foreign journals, in every case of which the rupture of an ovisac, and escape of an ova, has been distinctly authenticated. It is very difficult to conceive how an opinion can be more clearly supported by facts, than that which leads us to believe that the exciting cause of menstruation is the periodic maturation and discharge of ova from the ovarium. And that this function of the human female is accompanied in all instances by this phenomena.

Under this head Mr. W. treats of spurious menstruation, a condition which he believes to arise from ulceration or organic disease of the *os uteri*, vagina or vulva; he cites three cases illustrative of the importance of clear diagnosis, and the happy effects of appropriate treatment.

Chapter 2d is devoted to a consideration of those "conditions which particularly influence menstruation, at its commencement." In treating of the age of puberty, he gives a table which exhibits the

respective ages at which menstruation commenced in four thousand females, including women of all classes indiscriminately met with in private and public practice. The average age of the first menstrual crisis was fifteen years and nearly seven months. Of the four thousand spoken of, 892 or 22.3, out of every hundred, accomplished the change of puberty with difficulty. The most favorable age, for the accomplishment of this function was between the ages of 15 and 16 years, whilst the periods most unfavorable, was previous to the first and after the second.

The influence of temperament in determining the character of diseased menstruation is spoken of. The best form of constitution he considers, that of the "*sanguine-bilious*, or the *bilious sanguine*." According to the predominance of one, or the other of these leading traits. The combination, or form spoken of, as the "*sanguine-lymphatic*, or the *lymphatic sanguine*," is the most unfavorable, and in England is frequently met with.

The "Scrofulous Diathesis," has much to do with determining the character of difficult menstruation. We shall pass over this part of the work and take up that which treats, "of employment as influencing the crisis of puberty." We cannot say that the facts which grow out of statistics in this matter are susceptible of any important practical application, in the treatment of the diseases of menstruation, but only in a prophylactic point of view. The conclusions of Mr. W. are drawn from observations made upon 4000 individuals, 2127 of whom were engaged in various kinds of manufacturing business, of whom 511 or 24.02 per cent. suffered from deranged menstruation. The remaining number 1873, were domestics and farm-servants, hawkers, seamstresses and shop-women, and included also 161 females, whose parents were in affluent circumstances, and who at the time were engaged in their educational pursuits. The subjoined table contains the results.

	Kind of Occupation.	No. of Cases.	Age of of Puberty.	No. of unfavorable cases.	Percentage of unfavorable cases.
	Of Females employed in Manufactories.				
Group 1	Spinners and piecers . .	520	15·58 yrs.	143	27·50
Group 2	Power-loom weavers . .	406	15·83 yrs.	104	25·61
Group 3	Carding-room hands . .	483	15·25 yrs.	97	20·08
Group 4	Warehouse hands, &c. . .	465	15·17 yrs.	117	25·16
Group 5	Fustian-cutters, hand-weavers, &c.	253	15·85 yrs.	50	19·76
	Of females engaged in home and out-door employments.				
Group 6	Domestic servants, &c. . .	1349	15·60 yrs.	249	18·45
Group 7	Seamstresses, &c. . . .	363	15·69 yrs.	74	20 38
Group 8	Educated ladies	161	14·41 yrs.	52	32·30

Comments upon this table we think unnecessary, as the facts show for themselves. We cannot refrain however, from saying that we think the numbers far too limited for a strict reliance to be placed upon the results. In noticing the last group in the table it will be seen that the per centage of unfavorable cases, is greatly increased over all the rest; it will also be seen that the average age when the first menstrual period, made its appearance was in this class nearly a year earlier. The evil results of the present mode of education has become proverbial in the profession, the utter neglect of almost all physical education for "the finer accomplishments of high life," are dearly paid for, as is clearly seen in all large cities. The high tax put upon the mental, at the expense of the physical powers is plainly manifest in the sallow complexion—the dull and lifeless eye—the relaxed system—in toto, the physical imbecility of fashionable life. The diseases of this class of persons are almost characteristic at this period of life. Speaking on this subject our author says,

"The prevailing diseases of educated females at the age of puberty are pre-eminently those of an hysterical character. The affection does not so much precede, or retard menstruation; it usually accompanies the first efforts of the system to bring about the change, and continues to exist with great obstinacy, and often to an alarming degree, for a length of time after; being renewed or aggravated at each succeeding period, and simulating, from time to time, almost every disease, of whatever type, of which the female frame is susceptible. The approach of puberty is characterized, in such individuals, by an unwonted irritability of temper, fretfulness, dejection of spirits, singularity of manner, fits of laughing or crying for which no adequate cause can be assigned, a groundless dread of evil, disturbed and unrefreshing sleep; to which are added, palpitations, headache, nausea and loss of appetite, with great physical prostration. Symptoms of congestion supervene, with abdominal tumefaction, aching of the loins, and occasional swelling of the features or limbs. The first appearance of the menses is not unfrequently attended with an attack of hysteric convulsions, after which, should the discharge be furnished in sufficient quantity, the other symptoms soon undergo considerable modification, or altogether disappear.

"The cause of this peculiar susceptibility to disease in the class of patients now under consideration, becomes a question of paramount importance; and is, without doubt, to be found in the faulty system of education pursued at boarding-schools. The mental faculties are called into premature activity, and tasked to a degree beyond their power of endurance, and the mind is crowded with a mass of matter under the fictitious denomination of accomplishments, which Nature never designed that it should entertain; while the proper training of the physical constitution is totally disregarded. Moreover, the indulgence of a propensity, irresistibly active at this period of life, to the reading of novels, romances, and works of a similarly vicious character, has likewise a very injurious tendency. Witness for instance, the violent and often dangerous paroxysms of hysteric emotions occasionally consequent upon the mere perusal of an affecting narrative, having probably no foundation save in overstrained analogy, or in fiction. These are agencies to which the unlettered are entire strangers, or which they experience but seldom and only to a very limited degree."

The beneficial influence of physical exertion, is evidently seen in marked improvement of physical development, in those who are addicted to such exercise. The due performance of all the functions

of the animal frame, requires exercise, and particularly so in regard to the healthful performance of menstruation. "In no class of people, (says our author,) is the menstrual function so healthfully performed as in those necessitated to earn the means of subsistence by personal exertion, provided always that the employment be suitably adapted to the constitutional powers of the individual; while the converse of this is known to obtain with those in easy circumstances. Amongst farm-servants and others of the class, the period of puberty is seldom accompanied by any derangement of the general health; but in the higher grades of society, it forms an era of the greatest anxiety, and is often the commencement of serious and irreparable organic mischief."

In large cities and manufacturing districts, there are thousands employed whose only means of support, is that which under the present arrangement tends unnecessarily, and that in great degree to derange health and destroy life. This state of things admits of a remedy, and it will be found as much within the power of those employed as the employers. Among those things which should be guarded against, says our author—

"May be mentioned, late hours, frequenting crowded and heated apartments, irregularity in times of eating, reading or conversing upon subjects which have a tendency to over-excite the imagination, too close application to the study of music, drawing, needle-work, and other sedentary pursuits, and the neglect of the necessary bodily exercises, the omission of which for a time is inevitably followed by inaptitude for them, and consequent loss of health. A multitude of evils are clearly traceable to inattention to that wholesome discipline which all have the power, to some extent, of practising, and without which the integrity of the physical as well as of the moral constitution cannot long be sussained. A systematic arrangement of each day's business, whether as regards necessary labor, pleasurable relaxation, or devotional exercise; and also in matters of a more trifling nature, which are usually looked upon as too insignificant for consideration, but which, nevertheless, are made to absorb some portion of time for their performance; is of the highest importance, and would, if duly observed, contribute in no small degree to the well-being of the individual."

On the subject "of climate as influencing the development of puberty," Mr. W. confines himself principally to the writings of others. Mr. Roberton's essays, in the Edinburgh Medical and Surgical Journal, and the London Medical Gazette, are freely drawn upon, and may be found to contain all that is found in this portion of the work.

Chapter III. is devoted to the diseases of menstruation, and is divided into "retention and suppression of the menses." Difficult, vicarious and metrorrhagic menstruation, under the first heading, a number of very interesting cases are related; illustrative, however, of no new point in therapeutics or pathology. One of them, however, we will transcribe.

"*Retarded Menstruation; Hysterical Epilepsy; Cure.*—M. P., of the nervous-lymphatic temperament, a domestic servant, had labored under a succession of catarrhal affections, during which she was troubled with difficulty of breathing, cough, and palpitation. On recovering from one of these attacks, she was seized with hysteric convulsions, which lasted two or three hours, and

left her greatly enfeebled. By the aid of some simple remedies she gradually recovered, and was able to resume her duties. After a few weeks, another and more violent attack of convulsions came on, the fits being repeated several times a day for three or four days in succession, and she again recovered. The attacks recurred, with increased severity, every three or four weeks, for ten months, when they recurred almost daily, and she was admitted a patient of the Lying-in-Hospital, in November, 1845. She was seventeen years of age, and had never menstruated. At the time of her admission, the fits were so sudden and frequent as to render it unsafe for her to go out unattended. In infancy and childhood her health was delicate, the right knee having for several years been the seat of "white swelling." Her present complaints, in addition to the convulsive affection, were severe pain of an intermittent character attacking one side of the head; pain along the spine and especially over the sacrum, and of the feet and ankles; irritable bladder; capricious appetite, flatulence with distension of the abdomen, and irregular bowels. The fits were always preceded for a few seconds by a sense of coldness which commenced about the hips and loins, and rapidly extended along the spine until it reached the head, when she suddenly fell down in a state of insensibility. The paroxysm over, she generally slept for a length of time, or if awake, was languid and drowsy for several hours.

"The treatment consisted in the repeated application of leeches to the hypogastrium, the hot hip-bath, and poultices to the abdomen; and in the administration of a mild saline aperient repeated at intervals of a few hours. The accession soon became less frequent and severe, and of shorter duration, and at the end of a week the general health appeared to be somewhat improved; but no vaginal discharge had appeared. She was then ordered to take three grains of the iodide of iron, combined with one of quinine, every eight hours, and an aloetic aperient every third morning. After pursuing this plan of treatment a fortnight, she was greatly improved in health and strength, having had no recurrence of the fits during several days. At this period, from experiencing severe oppression and sense of fulness about the abdomen and loins, the hot hip-bath and poultices were again resumed; these had been only twice used when the menses appeared for the first time, and continued in sufficient quantity from three to four days. She has since menstruated regularly."

The 2d division, suppression of the menses, is one of great interest, not only in its bearings on pathology, but also that of legal medicine, many and trying have been the circumstances in which physicians have been placed by this state of things. Its general causes are well understood, but there are times when a knowledge of all the causes leading to such a state cannot be ascertained, nor even so much of them as to lead to even an approximation to the truth without going farther than in general the physician is permitted to go. Mr. W. cites a case which, in relation to those points of doubt, and its bearings upon pathology, is so clear, we cannot refrain from giving entire.

"*Suppressed Menstruation; Apoplexy; Congestion of the Cerebral Veins and Sinuses.*—Miss F. J., a young woman, nineteen years of age, of the sanguine-lymphatic temperament, in respectable circumstances, had enjoyed excellent health through life, until within a few days of her death. She began to menstruate at the age of fifteen years and a quarter, without an unfavorable symptom; and the function continued to be regularly discharged every twenty-seven or twenty-eight days, (reckoning always from the day of commencement of one period to that of the next following:) the discharge occupied from four to five days at each return. On Thursday, the 25th of February, 1847, death deprived her of an aged and affectionate relative, with whom she

had resided, as an adopted child, since she was an infant, and from whom she received a considerable bequeathment of property. On the day of this occurrence, the menses should have appeared, according to previous custom; she experienced the usual premonitory symptoms of the functional effort, but the discharge did not appear. This failure was attributed to the fatigue and anxiety which she had endured for several days previously. Two days afterwards, (Saturday,) other relatives arrived at the house of the deceased, claiming the privileges of a nearer kindredship than that of the legatee; and during an altercation respecting the disposition of deceased's possessions, the girl was seized with violent palpitation, ending in syncope, from which, however, she shortly recovered. In the evening of the same day, she complained of headache, lassitude, and general *malaise;* for the relief of which, and with a view to encourage the suspended menstrual function, the hot foot-bath and a dose of medicine were employed. On the following day, (Sunday,) she experienced violent pain of the head and loins, with a sense of distension and oppression about the lower region of the abdomen: the menses were still absent. During the ensuing night, she was restless and feverish; and, about three hours after midnight, was seized with violent hysteric convulsions, accompanied with a sense of choking. This first attack was said to have lasted several minutes, and to have left her extremely languid, but sensible. After a short interval the convulsions returned with increased severity, continuing to recur in quick succession during the rest of the night; and in a few hours, the patient was found to be totally unconscious, even during the intervals of quiescence from the spasmodic affection.

"I first saw her nine hours after the seizure, and found her quite insensible, and incapable of being roused. The features were tranquil and of a leaden paleness; the eye was closed and free from vascular turgescence, the pupil widely dilated; the teeth were firmly clenched, and the tongue partially protruded between them; the breathing was noisy, but not hurried or stertorous; the pulse, beating seventy-two times in the minute, was full, but not free. Whilst prosecuting my inquiries, a violent paroxysm of tetanic convulsions came on, implicating, principally, the muscles of the abdomen, and, less powerfully, those of the thighs, legs, and arms; but producing scarcely a perceptible change upon the expression of the face. During the fit, the breathing became somewhat accelerated and more noisy: and a little froth began to be blown from the mouth as the contractions abated. The abdominal muscles in the supra-pubal region were gathered into the form of a circumscribed tumor the size of a child's head, which became a little, although but very slightly diminished, by evacuation of the bladder with the catheter: this circumstance created a momentary suspicion of the existence of pregnancy. Examination *per raginum*, however, immediately cleared up the doubt; the os uteri being small and linear; its lips smooth and even; and the whole organ light, loose, and of the unimpregnated size. Moreover, the tumor in question, losing its circumscribed character as the spasm subsided, was soon lost in a diffuse fulness of the whole hypogastric region, in which state the parts remained during the rest of the quiescent interval. The treatment consisted in free abstraction of blood from the arm; sinapisms to the abdomen and the calves of the legs, (to which parts she was said to have referred as being the seat of uneasiness and pain during several days previously,) evacuation of the bowels by enemata; and vesication of the nape of the neck. No remedy could be administered by the mouth, as the power of swallowing was entirely suspended. The bleeding appeared to produce some temporary mitigation of the convulsive movements, but did not at all diminish the frequency of the paroxysms; and there was not a gleam of consciousness either then or afterwards. The pupil was perfectly insensible to light, and dilated to a ring; the breathing became gradually more labored and stertorous; froth issued from the mouth, and the convulsions ceased two hours before the moment of dissolution. In twenty-four hours from the commencement of her illness she died.

"On *post-mortem* inspection, thirty hours after death, the brain, including the cerebellum and medulla oblongata, was perfectly healthy. It was not more than usually vascular; and there was no effusion whatever, either of blood or serum into its substance, or within the ventricles, or in any part of the cranial cavity. There was not a trace of meningeal inflammation. All the large sinuses, however, and the veins which terminate in them, were distended to their utmost limit. The two lateral, the torcular Herophili, the straight, and the longitudinal sinuses were gorged with black, firmly-coagulated blood; and the veins terminating in the superior longitudinal sinus were similarly distended and occupied, lying in the inter-convolutional *sulci* like tortuous earth-worms, equalling in their capacity the calibre of an ordinary writing quill.

"The thoracic and abdominal organs were all healthy.

"The *os uteri* was about a third of an inch long, and quite closed; the labia were of the ordinary healthy dimensions, and free from congestion. The body of the uterus was turgid; its right half, both anteriorly and posteriorly, was deeply injected with blood, offering a striking contrast with the opposite half of the organ, which was pale, with the exception of a small spot, here and there, of vascular turgescence. The cavity of the uterus was more dilated than it is usually observed to be when perfectly quiescent. Its mucous lining presented a most beautiful arrangement of the vascular capillaries, which were finely injected with what might have been a slightly-colored serum, giving the most delicate rose-tint that can well be conceived.

"The whole plexus of vessels approaching the uterus and Fallopian tube, enclosed between the folds of the broad ligament, were, on the side corresponding to the turgid moiety of the uterus before-noticed, distended with red blood; the great mass of them were observed to take a course parallel to the Fallopian tube, but were connected together by innumerable transverse and oblique branches; the whole forming a beautiful crimson band of net-work about an inch and a quarter in width, extending between the *ovarium* and the *uterus*. The Fallopian tube and *corpus fimbriatum* on the same side were turgid, of a deep crimson color, and appeared as if consisting entirely of an aggregation of injected capillaries. On the left side the vascular turgescence was less considerable, being confined principally to the outer extremity of the Fallopian tube, and adjacent parts.

"The ovaries were greatly enlarged. They were both covered with cicatrices, beneath some of which were remains of yellow bodies, in different stages of decadence. The left presented, at its upper part, a Graaffian vesicle, which appeared to have arrived at a stage of development beyond what is generally considered maturity. It was elevated to at least five-sixths of its entire dimension above the surface of the ovary in which it was imbedded; and through its beautiful transparent walls, the yellow germinal vesicle could be distinctly seen. Trunks of vessels of extreme minuteness, emerging from the surrounding *stroma*, mounted upwards upon the walls of this vesicle, subdividing into a multitude of smaller ramifications, which could be seen only by the aid of a powerful magnifier. A few of the loops constituting the *corpus fimbriatum* were adherent to the surface of the ovary close upon the base of the ripe Graaffian vesicle, as if designed to insure the unerring insertion of the one within the other at the moment when the organic act of ovular separation was intended to be accomplished. It is more than probable, that temporary adhesion of the floating *infundibulum* of the Fallopian canal to the vicinity of each matured vesicle, previous to its evacuation, takes place on every such occasion; the bond of union becoming dissolved so soon as the purpose shall have been fulfilled.

"The above case illustrates a form of disease consequent upon hysteric disturbance, which occurs much more frequently than has ever yet been acknowledged. Seldom does it happen, it is true, that a fatal termination is so speedily consummated, although such cases are by no means uncommon; and

in numerous instances, the issue, however protracted it may be, is nevertheless equally certain and disastrous."*

The frequent occurrence of organic mischief which has its foundation in this derangement of the functions of menstruation, is generally recognised, and yet not unfrequently cases do occur, in which important errors in diagnosis are made. The anomalous affections of the heart, when this state of things has existed for a length of time, and then partially restored, may be cited as an instance. Our author believes, "that a greater amount of irreparable mischief has its origin in this class of affections in the adult female, than in derangement of any other system of organs, not excepting those of digestion and assimilation."

The suppression of this function frequently leads to congestion, by which "inflammation of the lungs, the liver, the bowels, the bladder, the kidneys, or of the fibrous tissues, is frequently originated; and a similar condition of the nervous centres, induced by the same cause, is frequently the proximate precursor of convulsive affections, epilepsy, paralysis, or of sudden death; together with a host of morbid manifestations vaguely referred to spinal irritation." The case just cited is one which confirms in part those views, and others might be deduced from the work if space would permit.

Difficult menstruation is next spoken of. Much important light has within a few years past, been thrown upon this department of the pathology of menstruation, by the use of the speculum. The frequent occurrence of organic disease of the *os uteri*, is now admitted as one of the causes of this affection, a case is cited illustrative of it. Nothing novel in the therapeutics of this affection, is elicited from the perusal of this division. And we regret to see that some of the most clearly established principles of practice are omitted or not mentioned. Such, for instance, as the treatment of this distressing affecti n (in cases of stricture or coarctation of the *os*,) proposed by Dr. Mackintosh, viz: the use of the bougie, a practice admitting of successful application in a vast number of cases.

We pass over the divisions which treat of vicarious and metrorrhagic menstruation, and come to Chapter IV., which treats of that most critical period in the life of woman the "last menstrual crisis." Mr. W. commences this chapter by the recitation of a case, where the patient, aged 75 years, commenced menstruating, at the age of *thirteen*, and continued to do so excepting during the first two months of nursing until the period when the notes of the case were taken. She was the mother of fifteen children, born at thirteen labors. During the period of gestation, the menstrual function was regularly performed and to all appearances in the usual quantity and quality. Another case is also cited, when the patient continued to

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* "The morbid specimens, illustrative of the preceding case, were exhibited before the members of the Manchester Pathological Society, at their meeting on the 4th of March, 1847; and the like opinion was expressed, in reference to the frequent fatality of menstrual metastasis to the brain and spinal marrow, by the eminent and learned Dr. Knox, of Edinburgh, who was present on the occasion in question, and who offered some very interesting observations upon this class of diseases."

menstruate regularly until her fifty-fifth year, when it ceased, and returned again at the age of ninety, and continued for thirteen months, until death, regular in period, quantity and quality.

A third case is also related where the patient, aged sixty-six, has menstruated regularly except during the periods of gestation and nursing. Mr. W., then proceeds to enumerate some of the causes which tend to influence the precise period and character of this change, a table of 69 cases is given containing the per cent. of favorable and unfavorable cases, with their respective ages, &c. From this it appears—

"That a greater liability to disease exists in those who have the change protracted beyond the average age of cessation, than in those instances wherein it happens at an earlier period: the number of unfavorable occurrences being, for the former, one in three; for the latter, one in every four individuals. The number of pregnancies for each respectively, is greater in the former than the latter; but the abortions fewer; and their age at puberty is about six months later, and on the average less favorably accomplished."

He then proceeds to speak of the "Diseases of the last Menstrual Crisis." It is at this period that some of the most inveterate diseases, frequently of a malignant character, commence, and even in the most favorable cases, more or less trouble is experienced; for the purposes of practical convenience, he arranges the diseases of this period under three distinct heads.

"Each distinguishable from the other by the character of the discharge with which, early or late, it is almost invariably accompanied; and also, by the kind and degree of suffering which it occasions in the organ immediately implicated, and the sympathetic disturbances simultaneously awakened in remote parts of the body. The *first*, and most common of these affections, is characterized by a muco-purulent discharge from the vagina, generally denominated *leucorrhœa*, or the whites; but which differs from simple leucorrhœa in several important particulars; the *second*, is often accompanied by vaginal hemorrhage, the discharge differing, both as to its properties and in its source, from the menstrual product; the *third* form is characterized by a watery, sanious, serous, or ichorous discharge, which is sometimes mixed with blood, sometimes with pus, mucus, or albumen-like shreds, and occasionally with small portions of fleshy matter, the product of the organic change upon which it depends. It generally emits an offensive odor."

Each of these three divisions is illustrated by cases, one from each of which we select. The following case illustrates the course and treatment of the first.

"*Purulent leucorrhœa after cessation of the Menses; Disease of the lower part of the Uterus; Cure.*—Mrs. C. S., fifty-five years of age, of the lymphatic temperament, native of South Cheshire, consulted me in August, 1844, for disordered digestion, "inward weakness," and the whites, under which symptoms she had for several years been a sufferer. It was stated that she had borne eleven children at the full term of utero-gestation, and subsequently, two abortions, each in the fourth month of the process, and for which no adequate cause could be assigned. Her last abortion, which occurred in her forty-seventh year, was attended, at the time of delivery, by profuse uterine hemorrhage, which was continued in a moderate degree six or seven days; when an offensive, ichorous discharge came on, in

quantity nearly equalling what the *lochia* should be under favorable circumstances. Three weeks after delivery, the menses appeared, and were afterwards repeated at regular periods; the offensive secretion occupying the whole of each interval. In her forty-ninth year, the menses began to be irregular; sometimes continuing ten, twelve, and fourteen days, and sometimes being delayed seven or eight weeks; the light-colored discharge, which at this time had assumed the appearance of common pus, devoid of fetidity, occupying still the intermediate period. At fifty-two years of age, the menses finally ceased, but the leucorrhœal excretion continued undiminished, and for a length of time afterwards was observed to become periodically augmented, on which occasion it was usually attended with languor and febrile irritation, aching of the loins, distention of the abdomen, and aggravation of the dyspeptic symptoms, to which latter affection all her other sufferings were then, and always had been, attributed.

"At the time of her application for treatment, her prevailing complaints were: lassitude, loss of appetite, pain of the stomach, and all the usual concomitants of aggravated dyspepsia; and a copious vaginal discharge of yellow matter, communicating deep stains to the linen, which were difficult of removal by washing. Suspecting the existence of uterine disease, I explained my impressions in reference thereto, and suggested the desirableness of an examination, which was not then permitted. She was ordered, however, to use, night and morning, an injection of solution of sulphate of zinc, combined with wine of opium; to take a mild alerative and anodyne* dose at bed-time, and a draught of decoction of *cinchona* with extract of *taraxacum*, rendered slightly aperient by the addition of sulphate of magnesia,† twice daily. This treatment was persisted in about a fortnight, when she returned to the country, not perfectly well, but greatly improved.

"In March, 1846, Mrs. C. S. again applied for relief, the vaginal discharge, with its attendant inconveniences, having returned; although her sufferings, on the whole, were less severe than they had been formerly. She also complained, at this period, of piles, an affection under which she had not previously labored. Having, as she stated, more carefully attended to the invasion of the symptoms during this second accession, she strongly expressed her belief in the correctness of the opinion formerly given, in reference to the affection of the womb being the principal seat of mischief, and not the digestive organs as was before alleged: the leucorrhœa, with its attendant sympathetic manifestations, having existed several weeks before the stomach began materially to suffer. A specular examination being now made, the *cervix uteri* was found enlarged and unusually hard; the anterior *labium* and a small portion of the posterior, presented granulating surfaces, and a deep ulcerated fissure occupied the right *commissura labiorum*. The whole was covered by a thick, yellowish secretion of purulent appearance, exhibiting alkalescent properties; and a sanious discharge exuded from the orifice.

"The treatment consisted in the administration of similar medicines to those employed on the previous occasion, with addition of the application of nitrate of silver to the ulcerated surfaces. This remedy, which was used in form of a *strong solution*,‡ was five times repeated, at intervals of five or six

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* ℞. Camphoræ, gr. v.
Pil. Hydrarg. gr. iv.
Pulv. Opii, gr. j.
Misce, fiat, pl. iij. pro dosi.

† ℞. Decoct. Cinchon. ℥iss.
Extract. Taraxaci, gr. xv.
Magn. Sulph. 3j.
Misce, fiat haustus.

‡ ℞. Argenti Nitratis, 3j.
Aquæ Destillatæ, 3iij.
Misce, fiat solutio.

days, when the discharge ceased, and the parts were quite healed. A slight degree of ptyalism was manifest on the twelfth day of the treatment, on which account the pills were discontinued. She returned to the country, apparently well, at the end of five weeks; but was recommended to continue taking the draught some time longer, and to use, occasionally, the injection of *liquor plumbi* combined with an opiate."

The following may serve to illustrate the second division.

"*Uterine Hemorrhage after the Cessation of the Menses; Purulent Leucorrhœa; Varicose Ulcer of the posterior Labium Uteri; Cure.*—A poor woman, named Ann Carr, fifty years, of age, of the bilious temperament, was admitted a patient of the Lying-in-Hospital, on the 10th of April, 1846, for the treatment of leucorrhœa, an affection under which she had for several years been a sufferer. She stated that she had had fourteen pregnancies, the first six and the fourteenth of which terminated favorably at the full term of utero-gestation; the seven intermediate pregnancies were abortions,—four of which happened in the sixth or seventh months of the term, and were still births; and three before the end of the fourth month. When near the completion of her sixth pregnancy, she contracted a gonorrhœa from her husband, of which she thinks she was never properly cured: to the effects of this she attributes her subsequent miscarriages. The offspring of this pregnancy had purulent *ophthalmia*, and died emaciated. She was somewhat improved in health at the time of her last pregnancy; but that child was puny, and died in infancy. After her last nursing period, in her forty-second year, she menstruated regularly until the age of forty-eight, when the menses finally ceased; but the whites, which had existed ever since the first appearance of the discharge in the form of gonorrhœa, became at this period still more abundant.

"Five months after the above event, the patient being in very infirm health, with abdominal enlargement, creating a belief in the existence of a dropsy, a profuse uterine hemorrhage came on, which passed away in clots of small size. This continued in a moderated degree, without ceasing, more than four months, when it was replaced by the leucorrhœal discharge, in its accustomed form. Her linen, which she exhibited, was covered with thick, yellow stains, and the recent secretion was strongly alkalescent. She complained of a fixed, deep-seated pain of the right hypogastrium, near the groin; severe and constant aching of the right hip and thigh, and across the sacrum; frequent desire to void the urine, with sense of constriction in the region of the bladder; disordered digestion, and irregular bowels; attacks of alternate chills and flushes of heat; and great physical prostration.

"Examined with the speculum, the *cervix uteri* was found unusually tumid, and was traversed by a number of prominent venous branches of different sizes; the anterior *labium* was hard, hypertrophied, and excoriated; the posterior *labium* was also enlarged, and completely occupied by a flabby, purple-looking sore with irregular surface, from which a small quantity of blood oozed out during the examination.

"The treatment consisted in the application of leeches to the hypogastrium; and subsequently in the use of the solid nitrate of silver to the ulcer and to the whole of the lower part of the uterus. She also took, night and morning, a grain of calomel combined with half a grain of opium, until the mouth became slightly affected; and a dose of the compound decoction of sarsaparilla containing three grains of iodide of potassium, thrice daily, for six weeks. The nitrate of silver application was four or five times repeated, at intervals of a week; and after relinquishing the sarsaparilla, she was ordered to take small doses of quinine and aloes, for several weeks more. The improvement progressed favorably from the first. She was discharged cured, on the 15th of July, three months after her admission; but appeared sufficiently recovered several weeks earlier."

The following case which he quotes from the published reports of the Manchester Pathological Society may be given as a type of the third class of affections.

"*Disease of the cervix uteri of the cauliflower variety; Cerebriform cancer of ovarium; Malignant degeneration of Fallopian tube and of cellular structure of the pelvis.*—The subject of this case was a lady in respectable circumstances, of the sanguine-bilious temperament, who had enjoyed a tolerably comfortable state of health until within a year of her death, which occurred in Oct., 1846, at fifty-six years of age. Her seventh and last child was born at the age of thirty-three, when she became a widow. She ceased to menstruate at the age of forty-seven, without marked inconvenience; excepting a slight leucorrhœal discharge which had occasionally appeared during the preceding twelve months, having commenced at a time when the menses began to be irregular, and gradually increased in quantity as the latter waned.

"After the final cessation of the menses, the leucorrhœa was repeated, or augmented, periodically, at times corresponding to the natural monthly periods; but after some months it became irregular, both in the times of its recurrence and the quantity and appearance of the secretion. In her forty-ninth year she had repeated attacks of bleeding piles, during the existence of which the vaginal discharge ceased, or was greatly diminished, but re-appeared in its usual form as the bleeding from the hœmorrhoidal vessels subsided. From this period she continued to have, at irregular intervals of one to three months, alternate rectal and vaginal discharges, attended with a sense of weight at the lower part of the abdomen, and with lumbar and hypogastric pains, until the end of her fifty-fifth year, when symptoms of the specific affection set in, and the hœmorrhoidal affection did not afterwards appear.

"Decided indications of the malignant change were first noticed eleven months before death. The patient, having for several days experienced an unusual degree of languor, and a sense of fulness and oppression of the abdomen, was seized with uterine hemorrhage whilst walking in the street. She was not alarmed, however, by this event, believing it in reality to be a return of menstruation, a circumstance which she had heard was not uncommonly witnessed late in life. The bleeding was suffered to continue nine weeks without the adoption of any effective measures for its relief; and it was several weeks more before the patient would consent to the necessary vaginal investigation. At this period, the discharge, which for several weeks previously had greatly increased in quantity, and had undergone a notable change in its appearance, was so considerable as to require five or six changes of linen during twenty-four hours: it was a lightish brown, watery fluid, and peculiarly offensive. The functions of the bladder and rectum were also materially interfered with.

"Upon tactile examination, the pelvis was found occupied by a tumor of irregularly spherical form, with lobulated surface, of the consistence of soft cartilage, and elastic. It was firmly impacted in the pelvis, occupying the whole cavity; but by persevering efforts the finger could be insinuated between it and the *vagina* so as to reach the *cervix uteri*, which was slightly thickened, but its surface was smooth and even. The tumor was insensible to pressure, but the vaginal membrane was highly injected and irritable.

"By the aid of the *speculum*, the diseased mass, its surface being cleared of secreted fluid, appeared of a uniformly reddish-gray, or salmon color. Its structure was extremely brittle, small portions, the size of a pea or bean, being occasionally detached during examination. These fragments were semi-transparent, of a light ash color, and were soon reduced by pressure between the finger and thumb, into a thin, glairy pulp.

"The treatment, which was commenced seven months before death, consisted in the employment of mild tonic and alterative medicines: due attention being always directed to the condition of the urinary and alvine functions.

The local applications were the solid nitrate of silver freely repeated every six or seven days, with injections of chloride of lime, and of water, in the intervals. The solution of nitrate of mercury in strong nitric acid, was also several times tried; but the former remedy appeared to be decidedly preferable. After five or six applications, the symptoms were greatly relieved; the discharge was remarkably diminished, the tumor decreased in size, so as no longer to interfere with the action of the bladder or of the rectum; the hypogastric fulness and aching of the loins and hips were much less distressing, and the general health was decidedly improved; so that at the end of three months, very confident hopes were entertained of a successful issue. In the fifth month of the treatment, the tumor became reduced to the size of a small orange, having an excavated centre, with elevated, irregular edges. The discharge was no longer watery or sanious, but thick, yellowish, and purulent, and furnished in very small quantity; still emitting, however, an offensive odor. At this stage of the complaint, the patient began to experience severe and constantly increasing pain of the sacrum, hip, crest of the ilium, anterior part of the thigh, with tumefaction of the abdomen, and an anasarcous state of the whole limb; all on the left side of the body. The cause of these phenomena, which became daily aggravated, was satisfactorily revealed by the *post-mortem* appearances, to be presently described.

"The *speculum*, the employment of which was so strenuously objected to at the onset, became the medium of administering, in the most gratifying manner, to the patient's comfort during the latter months of her life. The sore, by its aid, being fully brought within view, the whole of the accumulated, offensive secretion could be effectually removed, and the surface treated with a soothing antiseptic agent, which rendered her comparatively comfortable for a length of time afterwards. These applications, which were composed of chloride of lime combined with *opium*, sometimes with extract of *conium* or of *belladonna*, became necessary every second or third day. On two or three occasions, when the operation was too long delayed, she experienced an attack of shivering, with increased pain of the *sacrum* and *hypogastrium*, vomiting, headache, and hectic fever. Such accessions were frequently repeated during the last few weeks of her life, and were always found to be most severe when a portion of the ulcerated surface had become changed, (which was several times observed,) into a black, powdery, melanotic matter of a putrid and extremely offensive odor. This deposition could always be completely removed by means of lint held between the blades of a sponge-holder; and it was, doubtless, owing to the timely removal of this putrid substance, and the application of powerful antiseptic remedies, that life was prolonged and rendered less painful: the melanotic change being thus prevented from implicating the deeper structures of the organ.

"On inspection of the body twenty-four hours after death, the *fundus* and body of the *uterus* were found of the ordinary unimpregnated size, and apparently free from disease; the *cervix* was thickened; and the *labia* were large, and expanded, presenting an uneven, ulcerated surface of malignant appearance, studded, here and there, with nodules of the original formation in form of granulations of different sizes, the remains of the tumor first noticed. The sub-texture of the adjoining walls of the vagina was loaded with hard, granular fat, some portions of which had undergone the malignant degeneresence. The whole of this adipose tissue was very vascular, the arteries especially being large and distinct; their coats thickened, and of cartilaginous hardness.

"The left *ovarium* was the size of a small walnut, very hard and lobulated; and from one of these lobules sprang out a tumor which had acquired the dimensions of a fœtal head of seven months' growth. This tumor, which had a thick shining coat, consisted of a fine granular matter, of the consistence and appearance of the white matter of the brain. It had insinuated itself between the common iliac vessels which were embedded in its substance poste-

riorly, and the *psoæ* muscles which were stretched along its anterior and outer aspect, having the lumbar plexus and anterior crural nerves running upon their surface. It was traversed by a great number of vessels with thickened coats, of considerable size; and some apparently enlarged nervous filaments were also traceable upon it.

"The corresponding Fallopian tube was enormously distended in its whole length, the diameter of its caliber being about three-quarters of an inch. This very unusual product of disease, from the convoluted arrangement of the viscus, and the adhesion of its external sides to each other in places where they had fallen into contact, together with its morbid attachment to the adjacent surface of the ovarian tumor, gave it, at first sight, an appearance as if forming an integral part of this body; but the adhesions being broken down, and the convolutions of the tube unravelled, it could be elongated into a soft cylinder having the thickness of a man's thumb, and of a pearly whiteness. Its fimbriated extremity was soft and pulpy, and looked like the surface of a granulating ulcer. The two outer thirds of the tube were filled with a soft cerebriform cancerous deposit;* its inner third contained a fluid resembling pus, which gushed out upon an opening being accidently made through its parietes. A number of enlarged vessels and filaments of nerves were seen joining the tube near its fimbriated extremity.

"Changes of a precisely similar character, in the insipient stage, were observed in the organs of the opposite side. The right *ovarium* had the dimensions of an ordinary-sized bean, and was very distinctly lobulated. One of its lobules, larger than the rest, was indurated; and to this the *corpus fimbriatum* of the corresponding Fallopian tube was morbidly adherent. The two outer thirds of the tube itself were dilated to at least ten times the ordinary dimensions; its walls were thickened and highly vascular.

"There can be little doubt, upon carefully reviewing the history of the preceding case, that the disease had its origin in the lower part of the *uterus*, and that it was subsequently conveyed to the Fallopian tubes, and thence to the ovaries, which were the last to become affected. For, looking at the relative state of advancement of the morbid growth in the Fallopian tube and corresponding ovary on the right side where the change appears to be in the incipient stage, the disease bears evidence of having had an earlier date in the former than in the latter; and the same may reasonably be inferred in reference to the primary stages of the affection on the left side."

We have quoted these cases, although lengthy, for the purpose of giving the reader the opportunity of hearing Mr. W. speak for himself. These cases are exceedingly interesting in their history, pathology and treatment—but why he should treat so minutely of the organic lesions of the uterus, and neglect to speak of those equally perplexing in their character, (we mean those of a nervous character similating organic disease of other organs,) we cannot well conceive. Certainly they are cases of great interest to the general practitioner, and not unfrequently tax his best judgment in forming a correct diagnosis. It is this class of affections also which lays the foundation for organic mischief. This is clearly proven by the frequent occurrence of organic diseases of the kidneys, heart and brain, which present themselves within a short pe-

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* "There can be no doubt about the malignant nature of the disease in this case: the fact having been satisfactorily substantiated by the testimony of my friend Dr. Renaud, who submitted several portions of the morbid product to careful microscopical examination.

riod after this change is effected. We should have been much pleased to have seen this subject handled in the same free and impressive manner that the diseases of the uterus are.

Chapter V. is devoted to the consideration of the "Signs of Pregnancy." The first part of this chapter is devoted to a few general observations on the importance of a thorough understanding of the subject; in relation to diagnosis, a number of cases are cited where gross mistakes were made—one when the patient was pronounced not pregnant by a number of practitioners; her symptoms were referred to dropsy, and the operation of tapping was resorted to with the escape of about five pints of fluid, two hours after which, she was delivered of a full grown living child. From the history of this case, there is but little doubt but that the uterus was entered, and the liquor amnii drawn off. On the "Structure of the Uterus," he adopts the views of Dr. R. Lee. The subjects of "Peculiarities of the Unimpregnated Uterus," "Organic Changes after Conception," "Size and Form of the Uterus," "Position of the Uterus," "Quickening," and several others of minor importance we pass over, and come to "Suppression of the Menses." Our author in treating of this subject, gives the notes of seven cases occurring in his own practice, where exceptions to the general rule existed. One of which we will quote.

"Mrs. L., a delicate, lymphatic-looking woman, age twenty-nine years, is mother of one child, born four years after marriage, and which is now three and a half years old. This person, who has had no other pregnancy, began to menstruate, with difficulty, at the age of eighteen, after having had leucorrhœa, which was periodically augmented, for more than half a year previously. This morbid product was a white glairy mucus, before marriage; but since, it has always been thick and yellow, and decidedly purulent. Menstruation, however, has been regularly performed since its commencement without a single interruption; being continued in its usual form during the whole period of pregnancy and lactation, and she was unaware of the existence of pregnancy, believing herself to be dropsical, until within a few weeks of her delivery. She has long been in delicate health."

All of these cases and in addition eight more were submitted to a speculum examination, the results of which we will give in Mr. W.'s own words.

"The discharge when moderate in quantity, was similar to ordinary menstrual blood, both in color, consistence, and in its chemical reaction: it differed materially, however, in different persons, and in the same person at different times, with respect, especially, to the relative intensity of its alkaline properties. When in considerable abundance, small clots were sometimes thrown off, as happens, occasionally, in cases of menorrhagia. All the patients had leucorrhœa, in greater or less degree, accompanied by the train of sympathetic disturbances usually attendant upon these affections. This product communicated yellowish stains to the linen upon which it was deposited, and exhibited alkaline properties; evidences of a conclusive kind as to its purulent character.

"On examination with the speculum, inflammation or ulceration of one or both labia, or of the cervix uteri, complicated in some instances, with warty excrescences growing from the cervix, or from some part of the vaginal membrane, vaginitis, &c. was met with in every case, without an exception. Fif-

teen cases were submitted to this kind of examination at the time the blood was flowing."

Thus it will appear that the alleged cases of menstruation during pregnancy are not the proper performance of this function, but the result of organic lesions of the uterus or vagina. The bearings of these facts ought to be recognized in medico-legal science. Several other subjects are treated of under this chapter, such as the condition of the urine, sensorial manifestations, death of the fœtus in utero, &c., which we are compelled to pass over in order to give room for a notice of his observations on abortion. This subject is embraced in chapters vi., vii., viii. and ix. Chapter vi. is devoted to the statistics of abortion. A number of tables are given relating to this subject in various phases, from which it appears that more than thirty-seven out of every one hundred experience abortion before the period of thirty years. It is generally believed that first pregnancies have more frequently a premature termination than those which come after. Mr. W. does not coincide with this opinion, from his observations he is inclined to believe that the third and fourth pregnancies, and perhaps the last, which occur near the termination of the fruitful period, are most frequently unsuccessful.

Chapter vii., viii. and ix. treats of the causes of abortion. In the first, those causes which appear to be accidental and in part referred to sources independent of organic lesion of the uterus are mentioned. Of 1222 abortions, the following causes were said to give rise to them:

"'Inward weakness,' impaired state of the health generally, and acute disease	911
Accidents, mental perturbations, &c.	222
No assignable cause	90
	1222"

"Placenta Previa" and "Congestion of the Uterine Circulation" takes up the most of this chapter, several cases are given in illustration of this state of the uterus, with the appropriate treatment.

Chapter viii. is confined to the subject of leucorrhœa as a cause of abortion. This subject is handled rather extensively, and, as we conceive, somewhat thoroughly. Two forms are spoken of, viz.: mucous and purulent. The first of these Mr. W. believes to be purely an affection of the mucous membrane of the vagina. The distressing itching of the vulva, which frequently accompanies this form, may be promptly relieved for the time being by the use of the following lotion:

℞ Acidii Hydrocyanici, m. ix.
Morphiæ Muriatis, gr. viij.
Aquæ Destillatæ, ℥ viij. Misce, fiat lotio.

This form is seldom the cause of abortion, except in those cases where great debility is induced by its long continuance. The best remedy for this affection is a solution of the nitrate of silver, one scruple to half a pint of distilled water. Purulent leucorrhœa is of very frequent occurrence, and in all cases, where it does exist, it

may be looked upon as indicative of suppurative inflammation. The symptoms are readily distinguished and the diagnosis easily made out, if not by means of the toucher, at least by the use of the speculum, when it will be found in most cases the result of inflammation or superficial ulceration of the os or cervix uteri.

Chapter ix. treats of the organic diseases of the gravid uterus as a cause of abortion. The following is his division with a condensed description of their leading symptoms:

"1. *Inflammation* and *superficial erosion* of the lower part of the uterus, implicating one or both labia, and more or less of the external and internal cervix; accompanied by a yellow vaginal discharge which is occasionally tinged, sometimes largely mixed, with blood. This affection commonly interferes injuriously with the process of utero-gestation in the seventh, eighth, and ninth months of pregnancy.

"2. *Varicose ulceration*, commonly occupying the back part of the anterior labium, sometimes being confined to the posterior, and, occasionally, implicating both, is a frequent cause of abortion. It is always attended with a considerable degree of vascular hypertrophy of the adjoining parts. The discharge is muco-purulent, sometimes grumous or sanious: it is often largely mixed with blood, and, in some cases, is replaced by a dribbling hemorrhage which may continue for weeks or months uninterruptedly, if active measures be not adopted for its relief. Varicose disease oftener becomes troublesome during the latter than in the first half of pregnancy; and consequently, for the most part, interferes with the process of utero-gestation after the period of quickening.

"3. *Œdema* of the womb. The cellular structure of the cervix during pregnancy is often more or less loaded with serum, which may make its escape either slowly and constantly, or by sudden gushes of considerable quantity at a time, as if the animal membrane had been ruptured. The same parts are also sometimes similarly distended by congestion of the venous capillaries; but there is a well-marked difference between the two. Abortion sometimes occurs in the latter months of pregnancy, under these conditions.

"4. *Fissured ulceration* of one or both commissures, of the anterior or posterior labium, or implicating all these parts at the same time, together with inflammatory hypertrophy of the adjacent structures. This state of parts is accompanied with a yellow vaginal discharge which is sometimes mixed, in variable quantity, with blood; and it predisposes to abortion about the middle period of pregnancy, from the end of the third to the end of the sixth, or middle of the seventh month.

"5. *Induration* of the cervix, with or without abrasion of surface, is generally a chronic affection, but assumes more the acute character during the existence of pregnancy. It is, for the most part, accompanied with a vaginal discharge, which, if excoriation or ulceration of the labia be co-existent, is of a yellowish color: but white and glairy, frequently transparent and gelatinous, when the surfaces are unbroken. Abortion most commonly happens, under this state of parts in the third and fourth months of pregnancy, and is always attended with considerable suffering.

"6. *Endo-uteritis*, or inflammation of the lining membrane of the uterus during pregnancy, is frequently accompanied with hypertrophy of the whole organ, sometimes with induration of the cervix, or erosion of one or both labia. The discharge is usually thin, comparatively scanty, having a sanious or ichorous character, and is sometimes decidedly sanguinolent. Under this form of disease the product of conception is frequently thrown off during the first few weeks, or in the second or third month of pregnancy, accompanied with profuse discharges of blood, and often with intense suffering, similar to what takes place in some of the worst forms of dysmenorrhœa. I shall have occasion

to revert to this affection in the next chapter, as a common condition of sterility.

"7. *Follicular ulceration* sometimes constitutes the leading feature of uterine disease in cases of abortion. Of itself, however, it does not appear to create any considerable inconvenience; except on account of the irritable and inflamed state of the deeper-seated structures with which it is occasionally, though not always, associated, and to which circumstance therefore, any important functional inconvenience occurring during pregnancy, may be reasonably referred.

"8. The *gonorrhœal virus* is sometimes, perhaps frequently, implanted upon the lower surface of the uterus, being followed by inflammation of specific character, and accompanied with purulent discharge which may become very abundant, and difficult to be distinguished from that which women commonly denominate the yellows,—the result of simple erosion. The accompanying inflammation implicates the labia and adjacent cervix, and is especially liable to be extended to the lining membrane of the organ; it thus constitutes a frequent cause of abortion, which may occur at an early or late period according to the extent and severity of the affection.

"9. *Syphilitic* disease, both in its primary, secondary, and tertiary stages, is capable of inducing abortion at any period of the process, but most frequently perhaps about the sixth and seventh months. In the secondary form, its presence may in many instances be detected in the uterus, years after it was believed to have been eradicated from the system, and when no other evidence of its existence but this can be discovered, until is is seen to develope itself in unmistakeable characters in the offspring. The appearances presented by the labia and cervix of the womb affected with secondary syphilis are striking, and, I think, peculiar to this class of affections: they must therefore be regarded as of considerabie importance in diagnosis.

"10. *Prolapsus uteri.*"

Most of these divisions are illustrated by cases intended to show the course of treatment pursued, as well as the results of that treatment, and had we sufficient space, we should be induced to make a few selections of the most interesting, which would, we have no doubt, prove, to say the least, worthy of a careful perusal. It is difficult to pass by altogether, the subject of endo-uteritis, for if we mistake not, this is a very frequent cause of abortion in the early period of pregnancy, having had its foundation laid in that continuous form of dysmenorrhœa so frequently met with in irritable females, and who have neglected to obtain appropriate treatment, (for this form of dysmenorrhœa is readily amenable to treatment,) it continues to be a cause of abortion not unfrequently for several successive pregnancies. Its pathology is the same as that of inflammation of the mucous tissues elsewhere, and when persistent gives rise by extension to other parts, producing enlargement of the body of the uterus. Its symptoms and treatment may be gathered from the following case:

"*Six abortions in succession, occurring in the second and third months of pregnancy; endo-uteritis; cure.*

"Mrs. B., a lady in respectable circumstances, aged twenty-nine, of the sanguine-bilious temperament, was married at twenty-two years of age, having previously enjoyed good health. During the early part of her first pregnancy she had an attack of inflammation of the bowels—(metro-peritonitis most probably;) and, during convalescence, a yellow leucorrhœal discharge came on, which has continued ever since. The child had purulent ophthalmia, which

ended in loss of sight of one eye; it died aged nine weeks. Her second pregnancy was attended with much suffering, and frequent threatenings of abortion. The child, born at the full term of utero-gestation, had purulent opthalmia from which it recovered, and is now living. Her third pregnancy terminated at three months; her fourth, fifth, sixth, seventh, and eighth, in the seventh or eighth week of the process, without assignable cause; the circumstances being similar in all the instances, and the attendant phenomena exhibiting the same characters in each case respectively. These six abortions occurred in the space of three years.

"When not pregnant, she menstruated monthly; the discharge, which was in considerable abundance, sometimes clotted, and continuing six or seven days each time, being preceded by augmentation of the leucorrhœal secretion, violent lumbar and hypogastric pains, bearing-down, palpitation, nausea and vomiting, rigors, and irritative fever. During the existence of pregnancy, menstruation was suspended, but the suffering became increased. Each abortion was preceded for several days by uterine hemorrhage, which often passed away in clots, accompanied with violent bearing-down pain of an intermittent character. A distinctly-formed substance, regarded as the product of a 'false conception,' was expelled on each of these occasions.

"I first saw this patient on the 10th of February, 1847, the day after her sixth abortion. Since her delivery on the previous day, she had been perfectly free from labor-pain. The substance produced as the product of conception, was partially enveloped in coagula, which being cleared away by washing in water, appeared as a globular tufted mass, about the size of a large walnut; the tufts, which were those of the chorion, were equally perfect on all sides, showing that its implantation upon the decidual surface had not been effected. This enclosed a cell nucleus containing the ovum, which had acquired the size of a large orange pippin. The hemorrhage had been considerable, and was still flowing. The body of the uterus was large, and painful upon slight pressure; the cervix thickened and elongated, and the labia were pouting and unusually firm. Specular examination was not at this time attempted. The treatment, during the first few days, consisted in the exhibition of a cooling saline aperient at intervals, and of two grains of opium combined with the same quantity of *hydr. subm.* at bed-time.

"A fortnight afterwards, the patient expressed herself as being in about the same condition as she had been at a corresponding period after her previous abortions. She was exceedingly pale, languid, alternately chilly and feverish, without relish for food, unable to sleep, and complained of constant aching of the loins and hypogastrium, a fixed pain of the right side of the abdomen, below the level of the umbilicus, and "inward piles," the voidance of the fæces being attended with considerable suffering. The body and cervix of the uterus were still large, hard, and painful to the touch. The labia, on being viewed through the speculum, presented a tense, glistening aspect; their opposing surfaces were of a vivid redness, as if erysipelatous, and this appeared still more intense within the orifice, from which exuded a quantity of a thin, brown sanies, emitting an offensive odor.

"The treatment consisted in repeated small bleedings from the sacral and inguinal regions alternately, at intervals of four or five days; in the exhibition of five grains of the cinchona extract combined with an eighth of a grain of *hydr. oxym.* twice daily, an occasional opiate at bed-time, and a dose of *decoct. sarsæ co.* three times a day. The weak solution of nitrate of silver was twice injected within the uterus in the manner recommended at page 155. In from three to four weeks, she was quite free from pain; the uterus appeared to have subsided to its normal dimensions, and was no longer irritable under pressure; the discharge had entirely ceased; and the general health was remarkably improved. She menstruated during the last week in March, and again at the end of April; being on the last occasion, entirely free from all feeling of discomfort or inconvenience."

It is this form of disease which commonly gives rise to the spongy state of the uterine portion of the fœtal membranes, so well described in Dr. Granville's Graphic Illustrations of Abortion. There is another cause of abortion, which in large cities is frequently met with, we mean syphilis. The influence of this disease as a cause of abortion is admitted by most writers upon this subject, but still its ultimate bearing is not well understood. Secondary syphilis is the form most frequently met with, that it is equally prevalent and far more disastrous in its effects upon the female sex, there can be no doubt, and that the constitutional difficulty is frequently transmitted from the mother to the embryo, is equally certain.

The local pathognomonic signs of the effects of constitutional disturbance, as seen in the condition of the uterus, are reduced by our author to a tabular form, of which the following in the order of their occurrence may be enumerated:

"1. *Endo-cervicitis*, or inflammation to greater or less extent, of the lining membrane of the cervix uteri, with inflammation, excoriation, or ulceration of the labia around the uterine orifice. This appearance was noticed in nineteen out of twenty-eight cases. 2. A *mottled* or *patchy* appearance of the cervix, consisting of a number of dark-red spots of irregular shape, surrounded by lighter colored portions; they sometimes appeared highly irritable and excoriated, but not aphthous. The whole cervix was generally enlarged and slightly indurated, and there was evidence, in most cases, of endo-cervicitis. This state of parts was noticed in eleven out of twenty-eight cases. 3. *Aphthæ* of the cervix, occurring in eight out of twenty-eight instances. The patches, which appeared perfectly white, of a circular or oblong shape, situated upon a dark-red base, were easily detached by the aid of lint, and left a bright-red surface of similar form and dimensions, having, in some instances, a very minutely granular aspect. These were associated with hypertrophy of the cervix, and sometimes endo-cervicitis. 4. *Warts* were witnessed in three of the cases registered in the preceding table—twice on the cervix, and once on the walls of the vagina. They were all associated with endo-cervicitis and hypertrophy of the cervix. These excrescences were witnessed, however, in many of the instances not tabulated. Inflammatory induration or hypertrophy of the cervix was present in most of the cases recorded in the table, and there was not unfrequently observed an extremely corrugated state of that part of the vaginal mucous membrane lying in immediate contact with the bladder, and beneath the arch of the pubis, with hypertrophy of the cellular structure surrounding the urethra and about the neck of the bladder."

Several very interesting cases are given, showing the effects upon the mother as well as upon the offspring, *(infantile syphilis,)* in cases where they are viable. The treatment is well illustrated, of which the following may be said to be a synopsis: 1st. In cases where ulceration of the os or external organs exists, the immediate free use of the nitrate of silver must be resorted to. 2d. In the secondary form the careful use of hydrar. sub. mur., combined with opium, must be used, great care taken, but in a very slight degree, to bring the system under its influence. Conjoined with this should be used a decoction of sarsaparilla comp. with small doses of iodid. pot. The benefit derived does not depend so much upon the sarsaparilla, according to our author, as upon the mezereon and guaiacum which it contains. He has also derived much benefit from the use of several indigenous remedies, such as the *solanum dulcamara, arctium*

lappa and the *rumex hydrolapathum.** This latter should be combined with the *taraxacum*. These may be used in the tertiary stage with great benefit. Often after a few large doses the effects are distinctly seen, but it should be continued for several weeks.

Chapter x. treats of "sterility," 21 pages are devoted to this portion of the work. M. Donné's work, (*Cours de Microscopie,*) is largely drawn upon in relation to the physiology and pathology of the spermatozoa or spermatozoides, as they have been called by some recent eminent physiologists. After which the subject of the pathology of uterine barrenness is taken up. Cases are related bearing upon the influence of *sanious leucorrhœa, endo-uteritis, syphilis, ulceration of the os,* &c., all of which receive a very good description. The treatment of endo-uteritis in cases of sterility by injections of nitrate of silver is highly recommended. How he should pass over the subject of peritonitis and its effects upon the pelvic viscera, producing adhesions and disorganization of the ovaries, fallopian tubes, disease of the graaffian vesicles, it is difficult to say, they are subjects equally important in forming a prognosis.

In conclusion, we rise from the perusal of this work, feeling somewhat disappointed. From the facilities enjoyed, and the material afforded, which, to use Mr. W.'s own expression, "is probably unequalled by any (institution) of a similar character in the kingdom," we did expect a more complete and mature work. The subjects treated are, as we remarked at the commencement of this review, exceedingly important, and to the general practitioner often a source of much perplexity. We sincerely hope that at some future period the writer may be induced to present the profession with a second edition, more perfect and comprehensive than the present. We do not wish to be understood to say that the work before us is possessed of no merit, and not calculated to facilitate the study of these diseases; no, by no means; for in it may be found a mass of

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* "The virtues of this remedy in the secondary, or rather in the tertiary forms of syphilis, cannot be too highly extolled. It is the *Rumex Hydrolapathum*, not the *acquaticus* formerly spoken of as an anti-syphilitic. The two varieties present very nearly the same physiognomical characters. The *Hydrolapathum* may readily be distinguished, however, by having its leaves *acute* at each end, and slightly glaucous, or mealy; whereas, those of the *aquaticus* are *cordate-oblong*, and their surfaces smooth and glossy. Moreover, the petals of the former are nearly *entire*, and unequally *tuberculated;* those of the latter are *reticulated*, and without tubercles. The sensible properties also of the root—the only part of the plant recommended for use—are considerably different in the two varieties: these in the former, being much more bitter, more powerfully astringent, than in the latter, and moderately blended with an agreeable acidity. I have for several years used it extensively both in public and private practice with the most gratifying results, in cases where sarsaparilla had been given in large doses for many months together without the slightest benefit.

"Hydrolapathum will be found equally serviceable in several forms of disease besides those of syphilitic origin, especially in some chronic cutaneous affections, glandular enlargements, atonic dyspepsia, and others essentially connected with a bad habit of body. It may be advantageously conjoined with *taraxacum*, and sometimes with senna, or rhubarb. It possesses the additional recommendation of being exceedingly cheap, and easily prepared for use."

facts, which, if properly condensed and arranged, would serve much to elucidate the study of the diseases treated of—facts which no where else can be found on record, and facts, which, in the hands of the practitioner of medicine, may serve much to assist him in the discharge of his difficult and responsible duties.

ART. X.—*The Principles and Practice of Midwifery.* By DAVID H. TUCKER, M. D., Professor of the Principles and Practice of Medicine, &c., Philadelphia, 1848: Lindsay & Blakiston, royal 12mo., pp. 405.

THIS volume is one of a series entitled the Medical Practitioner's and Student's Library, and is professedly without the slightest claims to originality, "but based upon the valuable materials derived from the numerous works, both American, English and French, which have been published within the last few years."

Whether the compilation was demanded more by the profession, than by the commercial enterprise of the publishers; whether, in other terms, a book to read, or one to sell, was most required, remains for the author and his readers to decide. A striking discrepancy between the title of the book and its contents, does not greatly strengthen the supposition that scientific utility alone, was consulted in the preparation of the work. "By the term midwifery," remarks the author, "we mean that branch of the science of medicine which treats of the management of females during pregnancy, labor, and the puerperal state." Yet, throughout the book, no allusion is made to the perplexing and hazardous affections immediately connected with parturition, peritonitis, inflammation of the uterus, mania, and many other diseases appearing during the lying-in period, are surely *puerperal states*, and come sufficiently under the especial cognizance of the accoucheur, to receive some attention from a source professing to furnish the "principles and practice of midwifery."

But without dwelling on these important omissions, which it may be in contemplation to supply in a subsequent volume of the library, we pass to the matter of the pages before us.

The first two chapters are employed in detailing the anatomy of the pelvis and female organs of generation.

The 3d chapter is devoted to a consideration of the physiology of the generative organs. Dr. Tucker observes, in treating of menstruation: "Menstruation must be regarded as a phenomenon consequent upon or secondary to the full development of the generative system, and closely connected with periodic discharge of *ova*."

Connected with the subject he refers in a general way to results, and deductions from the interesting experiments of Bischoff, Pouchet, Raciborski and others; "1. In animals, a discharge from the organs of generation takes place at stated periods, which bears a strong analogy to the catamenia in women. 2. In animals this

supposed catamenial period is always coincident 'with heat,' or rutting. 3. If, during this discharge, the ovaries of animals be examined, it will be found that the ova maturate and are thrown off into the fallopian tubes, entirely independent of sexual intercourse. 4. In women, who have died during, or near, the menstrual period, the ovaries are found congested, and there exist small excavations within them, from which the maturated ova have been discharged, as in animals, entirely independent of coitus."

Description of the ova, of the manner in which ova are separated from the ovaries; of their progress and development; we may only mention the increased perplexity the late doctrines of their separation create, as to whether fruitful sexual intercourse is requisite for the formation of true corpora lutea. That a difference exists between the size, color, figure, vascularity, and texture of a corpus luteum, succeeding the maturation of an ovum, at the time or subsequently, fecundated; and the corresponding qualities of a body following the separation of an ovum, at the time or subsequently, unfecundated; that in other words there are true and false corpora lutea, we have not the slightest doubt from our own observations. But why should this difference obtain, if the process of maturation, is *in all instances* independent of seminal fluid? After having received the theory of a periodic discharge of ova, independent of coition, we find Dr. Tucker in the position from which we would have him extricate us. He thus discourses:

"We may conclude then that the corpus luteum, resulting from conception, differs considerably from that formed after the maturation and discharge of ova, independent of coitus. Why this difference should exist, it is difficult to say, since the organic process of maturation and discharge is identical in the two cases. It has been supposed that the vivification of the germ, and its subsequent retention within the uterus, may exert a reflex influence sufficient to vary the degree of development of the granules, which line the inner membrane of the ovisac."

The author's attempt at a reconciliation is not likely to prove availing. The supposition he brings forward resorts to that vague expression, *reflex influence*, which from its unwarrantable employment has become to many persons only a *reflex avowal* of perfect ignorance.

In his lectures to his class, Prof. Gilman offers a more satisfactory explanation on the possibility that a greater degree of excitement and vascularity is produced in the ovarium, by the presence of semen within the uterus or fallopian tubes, than occurs when seminal fluid is absent, and from this increased excitement different formations result.

The matter would be readily solved, were we to admit the possibility of fecundation taking place in the ovarium, in which case, the development and maturation of ova, and the results from such maturation would be directly modified by impregnation.

Of course it is desirable in a medico-legal point of view to ascertain how far corpora lutea, are evidences of recent impregnation.

"Many persons have considered the existence of a so-called true *corpus luteum* as an infallible test of previous conception; others have maintained that no distinction could be really made between the false and true *corpus luteum*;

and that, therefore, the existence of this body could not be relied upon as a sign of impregnation. R. Lee, Wharton Jones, Montgomery, and others, insist that there is a distinction between the true and false *corpora lutea;* while Bischoff, and originally Raciborski, asserted that the simple maturation of the *ova*, without either impregnation or coition, produced *corpora lutea* identical with those formed when conception occurs.

"Dr. Montgomery's remarks upon the subject seem to us to settle it, especially as he is supported in his opinion by Lee, Jones, Raciborski, Pouchet, &c. He says, "In no one instance did I ever find a *true corpus luteum*, except as a product of conception; and reasoning merely on the subject, I would ask, if mere imagination or highly-excited desires, without intercourse, are capable of causing such a change in the condition of the ovary, should we not expect to find corpora lutea, almost invariably, in women who have been living with their husbands, or otherwise enjoying constantly the natural and perfect excitement of the generative system, without conception? Of the non-occurrence of which consequence, I can speak in very decided terms, from numerous opportunities of making examinations under such circumstances."

In a paper published in the seventh volume, of this journal, p. 304, Dr. S. S. Purple details the results of his investigations toward settling the question, and as his conclusions were drawn from a close and well-directed observation we owe our readers his impressions on the subject. He says: "From the numerous examinations which we have made of the ovaries of human females, at all ages and under all conditions of health and disease, during childhood, at puberty, before, during, and after menstruation, at the various periods of gestation, and after delivery, we are firmly of the belief that the *true corpus luteum is an infallible sign of conception;* and that the great diversity of opinion which has been put forth relating to the value of this body as an evidence of conception, has arisen from the want of a proper knowledge of the physiology of the ovaries, consequently confounding and calling all yellow bodies or spots corpora lutea."

Our own opinion fully coincides with that of the foregoing authorities. We have never found a body answering Dr. Montgomery's description of a true corpus luteum in either ovarium of a female, who had not been impregnated within the last twelve months of her life. Nor have we ever examined the ovaria of a woman, who had conceived within that time, without meeting a body which corresponded with the corpus luteum of Hunter, Montgomery, Lee, Jones, &c.

In relation to twin conceptions, it has been said there may be but one corpus luteum. Recently we discovered one of an unmistakeable character in each ovarium of a woman who had been delivered of twins, and who died the third day after delivery. The children were surrounded by separate membranes.

The author's plan for his remarks on labor may be learned from the following observation:

"We have made no classification of labors, but have preferred classifying the different presentations into *those* which require little or no assistance in delivery, as the vertex, face, and breech presentations, and *those* which require assistance, as in cases of shoulder presentations, since each one of these presentations may be accompanied by any one of the accidents, to be mentioned

hereafter, as complicating labors, we have thought it unnecessary to specify labors as lingering, flooding, instrumental, &c."

His directions for the management of those cases which require little or no assistance are judiciously and well conveyed. On the complications of labor opportunity is taken to introduce a lengthy extract of a translation, from the work of Mr. Cazeaux, dwelling chiefly upon the influence of rheumatism during pregnancy, parturition and the puerperal months.

Two chapters on uterine hemorrhage are principally occupied with the consideration of Dr. Simpson's practice in cases of placenta prævia, and Dr. Radford's advocacy of the same, together with the employment of galvanism for producing uterine contractions. Dr. Tucker does not receive the former gentleman's explanation of the reason why there is a total cessation of hemorrhage in placenta prævia cases after complete detachment of the placenta. He says:—

"But is it true that the principal source of hemorrhage, in partial detachment of the placenta, is from the surface of this body, and not from that of the uterus? We think not, because the blood-vessels, which actively transmit blood from the mother toward the placenta, would be much more apt to bleed, when ruptured, (as they must be when the placenta is detached,) than would the placental vessels, the current of whose circulation is directed towards the fœtus. That the latter may bleed some, cannot be doubted, but that the former bleed more, seems to us equally true."

Nevertheless he regards the treatment Dr. Simpson's views suggest with approbation.

"But our dissent from the explanation of Dr. Simpson does not necessarily imply a dissent from the plan of treatment he proposes. His treatment is based upon the positive fact that, in unavoidable hemorrhage, the complete separation of the placenta is usually followed by an arrest of the hemorrhage. . . . . It may then be assumed as settled, that inasmuch as the hemorrhage is usually arrested as soon as the placenta is completely detached, the mortality, in Dr. Simpson's mode of treatment, is much less, as far as the mother is concerned, than where turning has been resorted to; but that in the former case, the death of the child is almost certain, whereas in the latter, there exists some chance of its being born in a viable condition. The question then is this, is it better to resort *to an operation* which saves one child in four, but allows the sacrifice of one mother in three, or *to one* by which every child is lost, but by which only one mother in fourteen perishes?"

Upon this subject Dr. Tucker concludes to lay down the following rules:

"1st. That the plan proposed by Dr. Simpson, is most favorable to the life of the mother, but most injurious to that of the child. 2d. That this plan is applicable only 'in severe cases of unavoidable hemorrhage, complicated with a rigid and undilated os uteri, in which turning would be impossible or hazardous; in most primiparæ; in unavoidable hemorrhage, with premature labor, and an undeveloped condition of the os and cervix; in placenta presentations, with distorted pelvis; in cases where the extreme exhaustion of the patient forbids turning, and where the fœtus is ascertained to be dead, or is premature and not viable.' 3d. That in ordinary cases of unavoidable hemorrhage, turning may be relied upon."

Following this matter is an excellent chapter on the *deformities of the pelvis*, and the causes of the different contractions to which the pelvis is liable, referred to three classes.

"1st. Rickets. 2d. Mollities ossium. 3d. Arrest of development. In addition to these, there are some occasional causes which may produce pelvic deformity, such as luxations of the femur, amputation of one thigh, fractures of the pelvic bones, exostoses, &c."

Still another cause, which produces contraction of the pelvic outlet, might be mentioned with propriety, viz: healthy, muscular action. The osseous system, is subject alike with other tissues, to the law, that development shall equal the demand of exertion. Hence we find, in rural districts and among females following laborious occupations in cities, the pelvis often assumes masculine characters from the acquired necessity of a firmer structure and more extended surface for the muscular attachments of the inferior extremities. The tubers of the ischia are rough and large; the pillars of the pubic arch, approximated; the sacrum loses a degree of its curvature, and its transverse ridges become more prominent.

The nature of pelvic deformities are classified by the author as follows;

"1st, the *abnormally large pelvis*; 2d, the *dwarfish pelvis*; 3d, the *unequally contracted pelvis*; 4th, the *obliquely distorted pelvis*, as described by Nægelè."

The inconveniences attending the existence of each of these classes are lucidly explained. But we find no mention made of the masculine pelvis just alluded to, notwithstanding its greatest comparative frequency in this country. However, as a compensation for the oversight, we read the following remarks, under the head of *the unequally-contracted* pelvis, which may serve as our description of the obstructions produced by active and long-continued muscular action on the sacrum and ischia.

"The diameters of the inferior strait are often contracted by too great approximation of the tuberosities of the ischia, and inasmuch as this may take place independent of any disease, so also may it exist without alteration of the size of the pelvic brim. This form of contraction has been termed the *funnel-shaped pelvis*, and when it exists, the head may traverse with facility the brim and the excavation, and only becomes arrested in its progress, when it has arrived at the inferior strait."

We are confident that attention is not given this class of pelvic deviations which its comparatively frequent occurrence demands. Not one of the forms most dwelt upon by Dr. Tucker has been the subject of our personal observation, whilst repeatedly have we been called upon to render manual assistance in cases of arrest from contraction of the outlet. In fact since commencing this article, we have delivered a strong hardworking and muscular woman, of her first child, after a delay which had, at least, nearly proved fatal to the child, and which arose from the foregoing diminution of the inferior strait. In the case to which we refer, the os uteri had been perfectly dilated, the membranes ruptured, and the head occupying the pelvic excavation under expulsive pains, for twelve hours.

Examining the outlet, the soft parts were found soft and distensible; the tubers of the ischia felt from within the vagina were large and irregular; the pillars of the pubic arch were increased in size, and formed an angle under the symphysis of 65 or 70 degrees. Passing a finger between the head and the pubic rami, it was pressed upon with no inconsiderable amount of discomfort to the operator,—the head advancing to the bony outlet under each pain, and receding as the uterus relaxed. Such had been the patient's condition during the time specified:—her labor was terminated in all respects favorably, by the application of the forceps.

Now this case is only an illustration of the vitiation constantly coming before our notice, whilst the deviations and more manifest deformities elaborately detailed by European authors, and the descriptions of which are so diligently copied by our own writers, very seldom offer to exercise the judgment of the practitioner.

The signs indicating an alteration in the figure of the pelvis are divided into the *rational* and *sensible*. As an approximative rule deduced from the former, it may be laid down:

"Where the inferior extremities are unusually short, or unequal in length, or softened by disease, the pelvis, in a large majority of cases, has undergone some deviation in form and capacity. Again, in cases of spinal deformity, unaccompanied with any affection of the inferior extremities, the pelvis usually remains unchanged.

"If the female be short and the arms long, when compared with the rest of the body, the chin projecting, the legs short and crooked, some deformity of the pelvis may be suspected."

It may also be said with equal justice, when a female possesses an unusually firm and ample muscular development, with large hands, wrists, and ankles; short and thick phalanges; harsh features, and irregular teeth; we may be prepared to find a pelvis less calculated to bear children with facility, than afford a substantial frame work for supporting the body, and a secure attachment for the organs of locomotion.

By the *sensible* signs of deformity Dr. Tucker would be understood those ascertained by internal and external measurements. He describes the instruments of Baudelocque, and Contouly, and Van Huevel's modification of the latter,—he also gives their rules and modes of employment, adopting as the instrument possessing the most excellencies, that of Van Huevel. Yet we believe with him, "manual exploration offers much more accurate results in determining the form and capacity of the pelvis." Setting aside altogether, rules and figures for nicely estimating the size of the pelvis, we agree with Dr. Blundell when he says, "by passing the fingers between the bones and the head,—by ascertaining what is the condition of the head, and more especially the existence or the absence of a swelling of the scalp;—by learning what *has been* the duration of labor under strong pains after the discharge of liquor amnii;—by making out whether the promontory of the sacrum can be felt with facility or not;—and by inquiring of the patient what has been the result of previous labors;—I am enabled to say, in most cases, without difficulty, whether there is such a contraction of the pelvis as demands

the use of instruments. To me it matters little what is the precise measure below or above. With measures of a line or a quarter of a line I have little concern. All I want to know is, whether there is such a contraction above as to require the use of instruments, and by the means just described, I am enabled to ascertain it, without resorting to nicer measurements."

The operation of *turning* has devoted to its consideration one chapter of the twenty supposed to comprehend the principles and practice of midwifery. We are pleased not to find an approval of another of Dr. Simpson's views and practice in the matter of version. The learned professor argues at some length upon the advantages of grasping the child's *knees* instead of its *feet*, as usually practised. One of his principal advances, we believe, is, that in seizing the feet and bringing them first down into the pelvic cavity, the legs of the child are made at one period of the operation to stand out from the body at right angles. Another is, that less force is requisite to turn the child when the knees become the points of traction. Now as one experiment, in a question of medical practice, is more valuable than volumes of theoretical reasoning, let a new-born child be placed upon a table, its feet, legs and thighs, flexed upon the abdomen, occupying the same relation they did in utero, and it will be found almost impossible so to extend the legs as to form right angles with the body of the child. They become extended by a movement which requires no more space between the uterus and the anterior face of the child's body than is required by their thickness. If, then, a great increase of thickness in the fœtal ovoid is so easily avoided when there exists no surrounding compression, we have little to fear when the uterine fibres tend strongly to preserve each part of the fœtus in close contact with another. As for the greater ease with which version may be performed by grasping the knees—we have in several instances endeavored to obtain it. The result has been, to teach us in future, not to meddle with the knees; but on all practicable occasions proceed at once to the fundus of the uterus and secure the feet; we shall thus save ourselves much time and labour, and our patient no slight amount of suffering and anxiety. We have no doubt similar attempts on the part of others would afford the like instruction.

In the author's directions concerning version, we find the following:

"If the uterus be firmly contracted upon the body of the child, version will be rendered extremely difficult. In these cases, if the head presents in a favorable manner, it will be best to apply the forceps, but if there should exist a presentation of the body of the child, version alone is practicable, and in order that it may be accomplished, copious venesection, opiates, &c., should be freely resorted to. Where these remedies fail to induce sufficient relaxation, our only hope is in spontaneous evolution, and if this fail to occur, no other resource remains than to mutilate the child in the manner which will be explained hereafter."

One of the most potent agents for producing muscular relaxation is chloroform. Though the question may be raised, has it this effect upon the uterus? We answer, it has for a short time after exhibition, especially if complete anæsthesia be produced. Sufficient time will

generally be allowed between the first moment of perfect insensibility and the recurrence of uterine action, for introducing the hand within the uterus and turning the child. In some instances, ten, and in others, fifteen minutes will be found to elapse before the uterus resumes its contractions—much however depending upon the suddenness and degree with which the system is impressed by the vapor. Our experience with its use for relaxing the uterus under the circumstances above alluded to, is confined to one case. The patient had been in labor several hours; the liquor amnii discharged half an hour; pains expulsive and energetic. The arm was found in the vagina, the shoulder occupying the mouth of the womb, strongly pressed down into the lower pelvis. It was deemed unsafe to attempt version immediately, so strongly did the womb contract. The patient was then rendered unconscions by chloroform inhalation. Every voluntary muscle relaxed; the pulse fell from 75 to 60 per minute; respiration deep; uterine action suspended, and the patient apparently slept. Upon the superinduction of anæsthesia the hand was carried up to the fundus of the uterus, the feet seized and brought into the vagina without difficulty. Chloroform being removed from the patient, sensibility returned, and with sensibility, labor-pains,—which with slight assistance as the head came to fill the pelvic cavity,—safely delivered the woman.

We are aware some practitioners state chloroform does not interfere with the functions of the uterus in parturition. Occasionally it does not. But generally we have found it interrupt the contractions of the uterus for a short time, in the same way, we suppose, that any sudden and powerful impression upon the mind or body of a parturient woman delays her delivery. This interval therefore may be very serviceable, as under the foregoing circumstances; it has for another advantage temporary relaxation only, whilst venesection, opiates, &c., suspend muscular action or produce general prostration beyond a desirable duration, and so far from becoming in the end advantageous, prove positively injurious.

It has probably been since Dr. Tucker wrote, that so great success has attended the use of chloroform in arresting the paroxysms of puerperal convulsions. We have employed the agent in two cases of this nature—in the first of which the paroxysms did not re-appear after the inhalation of three drachms of the chloroform; whilst in the second, they were suspended during an instrumentnl delivery and returned much mitigated, only upon being excited by the noise and confusion of a crowded humble dwelling.

An extended chapter on the application of the forceps, one on the subject of premature delivery, and another upon abortion, conclude the work before us. Closing the volume we have only to complain of faults *of omission.* These we trust, for the character of the Library, will be rendered less important by articles in other parts of the series. The book, we feel convinced, is a useful compilation,—one containing much that the student would not acquire were he to confine his study to older authors, and one possessed of matter the practitioner may peruse with advantage. E. B. S.

ART. XI.—*Elements of General Pathology; a Practical Treatise on the Causes, Forms, Symptoms and Results of Diseases.* By ALFRED STILLÉ, M. D., Lecturer on Pathology and the Practice of Medicine; Member of Med. Soc. of Observation, Paris; Fellow of the Philadelphia College of Physicians, &c. Philadelphia: Lindsay & Blakiston, 1848, pp. 483.

ALTHOUGH this work has already received a short notice in the pages of this Journal, yet it being wholly from the pen of an American author, and treating on an important subject, we have deemed it worthy of a more extended examination. It commences with an introductory essay, of near twenty-five pages, on *Medical Truth*, after which it is divided into four parts, viz.: Part 1st. Ætiology, or the Causes of Disease, making three chapters. Part 2d. The general Phenomena, Theory, and Classification of Diseases,—General Diagnosis and Prognosis; making five chapters. Part 3d. Semeiology, or Signs of Disease, embracing six chapters: and Part 4th. General Morbid Anatomy, embracing five subdivisions or chapters. The work is well written, which is far more than can be said of all our medical books; and presents a very fair summary of the present condition of pathological science.

Hence it presents the student with a very interesting and useful volume for study. The introductory essay contains some valuable suggestions, among much that is of but little moment. The author divides *truth* into absolute, revealed, intuitive, and demonstrative; and declares that *medical* truth belongs to none of these. He says, "These several kinds of truth are intellectual chiefly; they have their origin in the mind; they are evolved, weighed, and applied by the mental faculties. But there remains another, and very different one. This is *inductive* truth. It is that which belongs to the physical sciences, which is the sacred element of all (so called) natural laws; the search after which is the life-spirit of astronomy, of chemistry, geology and medicine, whose progress has been rapid while it was active, and slow when it declined. It is that very truth which is 'the daughter of time and not of authority,' and which alone can outlive the waste of ages, and man's contempt and neglect. Its origin is not in the mind, but in external nature. Observation is the great instrument of its discovery, and next, experiment which is observation under circumstances of our own choosing. Facts are its materials, co-ordinated facts contain its laws."

After dwelling at some length on this subject, he recommends very strongly the practice of committing all observations and cases to writing at the time, that we may never draw our conclusions from facts entrusted to the memory alone. This is an important direction, but has been much more frequently insisted on than practised by medical writers. "Three precepts," says Dr. Stillé, "may be laid down as fundamental, and essential in all researches after medical truth: 1st. That the cases must be observed and recorded honestly, minutely, and fully. 2d. They must be very numerous, the more so the better. 3d. They must be comparable." To the correctness and

value of these precepts, we most cordially give our assent. But we cannot say as much in regard to our author's views of *truth*. For we had supposed that truth was essentially the same, wherever found; whether in medicine, mathematics, or morals. It is conceded that there are different modes of arriving at it, as by *revelation*, by mathematical *demonstration*, by *observation*, coupled with rigid *induction*, &c. But we had verily supposed that a *truth* in medicine, was just as *true* and as *absolute*, as a truth in mathematics or in theology. There may be more difficulty in arriving at truth in medicine than in mathematics, because of the more numerous and variable circumstances attendant on the former: but when once arrived at, it is equally certain, equally demonstrative; and is, in fact, the result of the exercise of the same order of mental faculties. In both cases, the result is obtained by comparison and induction. And it certainly makes very little difference in the nature of that result, whether the things compared are imaginary lines, curves and angles, or real objects of perception. For in both they must be mentally real and present; hence, if the comparison be correctly made, the conclusion logically drawn, the resulting truth is, in both cases, equally demonstrative and inductive.

But we hasten over the introductory essay, to arrive at those parts of the work of more practical interest to the reader. And first, what is general pathology? This question is answered by our author as follows: "General pathology treats of the causes of disease, whether they exist within the individual or around him; of its forms, stages, symptoms, and terminations; describes its ravages in the organs of the human body; and points out the best methods of investigating and interpreting the symptoms furnished by them, in all the morbid conditions under which they have been observed. In other words, it includes whatever is common to diseases in general, and to particular classes of diseases." (p. 50.) This definition, which is doubtless in strict accordance with the views generally entertained by medical writers, gives to general pathology a wide scope; making it include, not only the whole of morbid anatomy and morbid physiology, or the nature and results of disease, but also nearly all that is included in works on the theory and practice of medicine. It seems to us, however, that if we are to have the whole field of medical science divided into several departments, each division should be as clearly defined and trespass as little on every other as possible. Hence, for the sake of precision and accuracy in study, we should greatly prefer making the term *pathology* bear the same relation to a diseased organization, that *physiology* does to the healthy. The first part of the work, treating of the causes of disease, contains little calculated to elicit special notice. The author makes the usual division into *predisposing* and *exciting* causes, and each of these are again divided into general and special. The doctrines, now prevalent in the profession, respecting the influence of age, sex, climate, season, hereditary predisposition, temperament, heat, cold, contagion, miasm, &c. are very fairly presented; but without that critical examination into the correctness of some, and the modus operandi of others, that we would like to have seen in a new American

work. We shall also pass over part second, which treats of the General Phenomena, Theory and Classification of Diseases; General Diagnosis and Prognosis.

Part third, treats of Semeiology, which our author defines to be "the *signs* of disease." And he indicates the difference between semeiology and symptomatology as follows: "The phenomena of disease are symptoms. All that instructs us in regard to what is hidden or obscure in the past, present, or future state of a disease, is a sign. . . . Hence every symptom may become a sign, but every sign is not a symptom; thus the character of the cause may be a sign of the nature, and probable course of the disease, but it is not therefore a symptom." Dr. Stillé makes the usual division of symptoms into *general* and *local*, to which he adds *sympathetic*, which though local, are developed at some point distant from that primitively affected and dependent upon its disorder for their existence." He then goes on to consider the signs derived from an examination of the various parts of the body, beginning with the external surface.

While speaking of the *color* of the skin, he refers to that interesting affection termed cyanosis, or *blue skin;* which has usually been supposed to depend on a mixture of the arterial and venous blood, on account of the foramen ovale of the auricles remaining open. It seems that M. Louis was the first to call in question this doctrine, so early as 1826; though Morgagni had related one case directly disproving it, which he dissected himself, and found the heart perfect with the foramen ovale closed; but the pulmonary artery was contracted and ossified. In 1843, Dr. Moreton Stillé," (brother of the author,) "in his inaugeral thesis, proved by the analysis of a large series of cases, that the cause of cyanosis was *uniformly* either contraction, obstruction, or imperforation of the pulmonary artery, or else some physical impediment to the natural course of the blood, possessing a similar mode of action, such as concentric hypertrophy of the right ventricle, singleness of the heart with contraction of the auriculo-ventricular opening, &c. This conclusion has since received ample confirmation, and especially from the investigations of Dr. Norman Cheevers, of London." See page 228.

According to this view, the obstruction to the passage of the blood from the right side of the heart to the lungs, gives rise to constant and universal congestion in the venous capillaries throughout the system. Hence, the livid or leaden color of the skin is owing to the obstructed and tardy venous circulation, instead of any mixture of venous and arterial blood. And even the opening of the foramen ovale is very plausibly represented as a result of such obstruction and the consequent distension of the right auricle, as was originally stated by Morgagni, in the case already referred to.

The following extract from the chapter on "signs from the digestive apparatus," will afford a very fair specimen both of the author's style, and his mode of treating the subjects which make up the work before us. "In all ages the *tongue* has been thought to furnish important information in disease, as well by those who have studied its various conditions, as by the practitioners who have made

its inspection a mere occasion for mysterious looks, and oracular remarks.

"Its size and shape, andthe characters of its coating have, at different times, been looked upon as positive diagnostic signs of disease, but these exclusive views have rarely outlived the persons who respectively gave them currency.

"Yet the conditions of this organ and of its functions, have in reality such a value as to entitle them to a full consideration. The tongue is the principal organ of the sense of taste, which is almost uniformly modified by disease. There is no more frequent sign of impending sickness, than the loss of a natural relish for food, and no surer indication of returning health than the recovery of this relish.

"The sick rarely receive from sapid bodies, the same impressions as in health; all the food prepared for them is equally insipid, nauseous or bitter, or they have constantly a perception of some one of these or other tastes. The insipid taste accompanies, especially, inflammation of the respiratory passages, including the nostrils, posterior fauces, and air-tubes. A bitter taste is most frequently experienced in dyspepsia, particularly in that form of it, attended with eructation or vomiting of bilious matter, and occasionally in those more distinct derangements of the liver, depending on inflammatory or structural disease of that organ, and which are accompanied by jaundice. An acid taste prevails in those other forms of dyspepsia, in which some regurgitations take place, and also in cancer of the stomach. A salt taste in the mouth, is a common precursor of hæmoptysis. A foul or putrid taste is generally due to diphtheritic inflammation, to suppuration, or to gangrene of some of the parts connected with the mouth, as the nose, throat, œsophagus, or lungs. It is also present in cases of obstinate and prolonged constipation. A metallic taste is usually the first sign of the constitutional influence of mercury; it is said also to occur in intermittent fever. In hysteria, hypochondria, and chlorosis, the taste is frequently perverted, and persons suffering under these complaints have often perceived the most exquisite flavor in chalk, charcoal, slate, and even in animal substances far gone in putrefaction. It is impossible to refer all of these morbid conditions of the sense of taste to one uniform cause. Some of these appear to be owing to the coating upon the tongue, while others may with more probability be referred to an altered condition of the nervous centres," p. 258.

Before leaving this part of the work, we must refer to one or two passages in this chapter on "signs from the circulatory apparatus. We have been taught by such men as Lænnec, Williams, Gerhard, and indeed by almost all writers on diseases of the chest, that the *impulse* of the heart was produced by the systole or contraction of the ventricles. And that the force of such impulse was in direct proportion to the muscular thickness of the walls of those cavities. Hence a forcible and prolonged impulse has been very generally regarded as one of the least complicated signs of hypertrophy of the ventricles. Dr. Stillé, however, not only adduces proof from the

writings of Drs. Pennock, Corrigan, and Chomel, that hypertrophy of the ventricles is not always accompanied by increased impulse; but also contends that the impulse itself is not caused by the systole of the ventricles. On this point he says, "the doctrine which appears to be most strictly in accordance with the facts, is, that the cause of the impulse is the *diastole* of the ventricle, its force being proportioned to the power with which the auricle propels its blood into the ventricle."

Independently of all experiment, it would be difficult to comprehend how the contraction of a hollow muscle could have any other effect than to diminish its volume, or that it could, while contracting, give a blow to a body external to itself. But vivisections of cold blooded animals confirm the justness of this objection to the received doctrine.

When the heart of a frog, which is transparent, is examined, the apex is seen to be thrust forward at the same instant that all the dimensions of the organ are enlarged, and its color shows it to be filled with blood, while the apex is retracted simultaneously with the lessening of the size, and the disappearance of the color of the heart. In other words, the projection of the apex corresponds with the diastole, and its retraction with the systole of the ventricle. Certain cases of malformation go to confirm this view. One such is reported by Cruveilhier, to this effect. A child was born with a deficiency in the upper part of the sternum, through which the heart projected. It lived nine hours. In this case the contraction of the auricles was exactly synchronous with the dilatation of the ventricles. During the ventricular systole, the heart contracted in every diameter, and no part of it was thrust forward except the apex, and that only with a slow spiral motion. The ventricular diastole, on the other hand, "'had the rapidity and energy of an active movement, triumphing over pressure made upon the organ, so that the hand closed upon it, was opened with violence.'" This movement was accompanied with a strongly-marked projection of the heart downwards. The rapidity, energy, and direction of the ventricular diastole here observed, demonstrate this movement to be the cause of the cardiac impulse. Very similar phenomena were presented in an analogous case reported by Dr. Robinson, of Petersburg, Va., in 1833; and both cases, it is plain, are in every respect confirmatory of the results obtained by vivisections of cold-blooded animals.

The combined evidence thus summarily and imperfectly produced, warrants, it is believed, the conclusion, that actual inspection of the movements of the heart, when made under favorable circumstances, teaches that the *impulse is synchronous with, and caused by, the diastole of the ventricles.*" (Pp. 319, 320.) And in regard to the impulse of the heart in hypertrophy, he further states that, "laying theories aside, if we compare any number of cases of cardiac hypertrophy, showing increased impulse, with another series in which the impulse is diminished, we arrive at a curious result, viz.: that in every one of the former class of cases, there is *auricular* hypertrophy, either alone or combined with a like state of the left ventricle; and that where the impulse is not augmented, or feebler than natural,

there is either dilatation and thinning of the auricle, or the hypertrophy is altogether confined to the ventricle; in one word, we find that *permanently-augmented impulse of the heart coincides with auricular hypertrophy.*" And from all this he states, "the conclusion is irresistible that *the impulse of the heart is caused by the diastole of the ventricle, and proportioned to the muscular power of the auricle.*" (p 322.) We have thus quoted Dr. Stillé's views on this subject, at length; not only because they were contrary to the generally received opinions of the profession, but because the question involved is one of much practical importance. For it is plain, that unless we correctly understand the causes and connections of the natural movements of the heart, we shall be continually liable to commit errors in our attempts to diagnoze the abnormal conditions of that organ. Taking into consideration only the facts presented by the author, his conclusions would seem to be well drawn; but when we compare them with the results of the numerous experiments performed by the British Physiologists, as well as those of Drs. Pennock and Moore, of Philadelphia, we confess that the weight of evidence seems strongly against him. But having presented both the facts and conclusions of Dr. Stillé, we leave the reader to canvass the question for himself, and hasten on to the last part of the volume before us. This occupies seventy pages, and presents a very brief summary of the present condition of *Morbid* or *Pathological Anatomy*. After alluding to the origin, progress, and value of this branch of medical science; and the mode of examining dead bodies, the author enters into a consideration of the blood in disease, and thus summarily, (and as we think, justly,) disposes of the long-controverted doctrines of *humoralism* and *solidism*.

"As all the tissues originate in the blood, and grow by the materials which it furnishes, the morbid relations of this fluid have a primary claim to be examined. It is not uncommon for writers of the present day to speak of the importance now attached to the morbid states of the animal fluids as indicative of a return to the old humoral pathology; but in doing so, they confound things essentially different. The humoral pathology adopted in the Hippocratic writings, and servilely followed in succeeding ages, was a pure hypothesis, which, as was stated in another place, assumed that the body was composed of four humours, whose various combinations produced diseases.

These combinations were, at the commencement of the seventeenth century, estimated by Sanctorius at eighty thousand. In the last century or two, much, indeed, was said of the acridity and putridity of the blood, and some imperfect notices of the physical changes occurring in that fluid were recorded. But there is little analogy between the views now entertained, concerning the influence of the blood in disease, and those speculative notions which ruled so long in medicine. The ancients not only imagined the humors, but also their qualities and effects.

With inquirers of the present day, the subject is simply one of observation, experiment, and induction. If here and there a medical chemist, impelled by the force of genius, and elated by the won-

derful results of his favorite science, overleaps the bounds of legitimate reasoning, and wanders in the trackless field of speculation, but few among the more eminent pathologists are tempted to follow his erratic course. The soundest thinkers receive his revelations with distrust. There is in fact a general unwillingness to adopt them as settled principles, until they have been tested by men of large experience in studying and treating disease, by men who regard the animal economy as something more than a machine, and the stomach as something different from a chemical retort; who recognise in it a *vital* chemistry and vital dynamics, governed by other laws than prevail among the instruments of the laboratory, and the workshop." (Pp. 419, 420.) The composition of the blood in health, is given on the authority of M. M. Becquerel and Rodier, as follows, viz:

	Males.	Females.
Water,	779	791.1
Globules,	141.1	127.2
Albumen,	69.4	70.5
Fibrin,	2.2	2.2
Extractive matter and salts,	6.8	7.4
Fatty matter,	1.8	1.62

It will be perceived that there is a marked difference in the blood of the two sexes. That difference, however, seems to be confined chiefly to the proportion of water and globules.

There are few or no diseases of sufficient gravity to affect the system generally, that do not, at the same time, induce important alterations in the composition of the nutritive fluid, and of all its ingredients the *globules* appear to be the most variable. They are proportionally diminished by pregnancy, by bleeding, and by all diseases of an *anæmic* character. Thus, the average composition of the blood taken from 35 chlorotic persons was as follows, viz.:

Water	824
Globules	94.7
Albumen	68
Fibrin	3.5
Extractive matter and salts	8
Fatty matter	1.8

In extreme cases of this disease the globules have been found to constitute only 14 parts in 1000. According to the same eminent authors quoted above, the blood globules diminish as pregnancy advances, their mean proportion not exceeding 112.6, and that without any reference to the existence or non-existence of plethora. They also found the average proportion of globules in persons who had been bled three times, to fall from 129.2 to 99.2. And in all cases the deficiency of globules is supplied by an increased proportion of water. According to these facts, the old idea, that bleeding diminishes all parts of the blood alike, is hardly true; and if the globules should happen to be the unhealthy portion, we might almost fulfil the popular notion of "drawing out the bad and leaving the good."—But while a diminished proportion of globules is a pretty constant accompaniment of anæmia, it by no means follows

that they are generally in excess in the condition of the system termed plethoric. M. M. Andral and Gavarret found the average proportion of globules in thirty-one plethoric persons to be 141; and MM. Becquerel and Rodier give as the average of six well-marked cases of plethora in males, 138. Hence says Dr. Stillé: "The authors just mentioned have established by their experiments, that the *plethoric condition*, and the symptoms incident to it, are probably the effect of an increase in the mass of the blood, and in nowise of any change in its composition."

This view is further strengthened by the fact, that we not unfrequently meet with decided symptoms of plethora in well-marked cases of chlorosis. We are told in the work before us, that the *fibrin* of the blood is chiefly altered in inflammations and fevers. In the former class of diseases it is uniformly increased, the average proportion being about 6 parts in 1000; but in some cases of pneumonia and acute rheumatism it rises as high as 10½. In the latter class it varies, of course, with the nature and type of the fever; being increased in those of an inflammatory character, and greatly diminished in all those of a typhoid type. Concerning the yellow or buffy coat, however, which has been so generally considered an index of inflammatory action, Dr. Stillé remarks: "But it has been ascertained that the buffy coat is very far from being the index of inflammation alone, or from constituting an index for depletion, as was formerly supposed; that it may exist in pregnancy, anæmia, and chlorosis, in all conditions, namely, in which there is a deficiency of the globules while the fibrin remains unchanged. Hence it appears that it is the quantity of the fibrin *relatively* to the globules, and not the positive quantity of the former, which occasions the buffy coat." (p. 427.) But we have neither time nor space to follow the author through all the changes in the several ingredients of the blood, during the progress of disease. There are, however, several questions of great practical importance suggested by this subject. 1st. Are the changes in the composition of the blood, primary disorders, giving rise to the morbid symptoms accompanying them, or are they, themselves, only symptoms or results of disordered action in some of the organs If the former, what are the causes which act directly on the blood? If the latter, what organs are connected with each specific change, and what is the nature of their derangement? These are questions left almost entirely untouched by our author, and which, indeed, require the most extensive research and observation to solve satisfactorily. Yet it is only by such solution that we arrive at strictly valuable practical results. Thus it aids us very little in the treatment of disease, to know that the proportion of globules of blood are diminished in chlorosis, or that the fibrin is diminished or changed in certain fevers, unless we at the same time know *why* they are so. That the blood is sometimes altered by the direct absorption of noxious materials, and thereby becomes a primary source of disease, we have no doubt; but that, far the greater number of changes that are met with, especially in chronic diseases, are produced by primary disordered action of some of the organs, we are equally certain. But it is no part

of our present task to enter into an investigation of this subject. Although the work of Dr. Stillé does not possess that original and thoroughly-investigating character, which we had hoped to see, still it is a very useful and well-written compilation on the subject of general pathology. N. S. D.

Art. XII.—*On Bandaging, and other Operations of Minor Surgery.* By F. W. Sargent, M. D. Philadelphia, 1848. 12mo. pp. 379.

We cordially agree with the compiler of this useful and attractive little volume, that the subjects upon which it treats, are, in general, too much neglected in our courses of professional education both public and private. They are, as Dr. Sargent remarks, "but slightly alluded to in systematic courses of lectures;" and he might have added with equal propriety, they are not often so presented to the student in the office of his private preceptor, as to be of much practical avail.

Having ourselves had, for years past, abundant opportunity of testing the acquirements of students, as well as of recent graduates, we have no hesitation in stating, that, except among those who have enjoyed the advantages of an hospital education, it is an exceedingly rare circumstance to meet with a young man who knows any thing whatever of the important practical details to which this volume is devoted, and which, for want of a better name, are embraced under the general head of what has of late been called minor surgery.

These subjects, so ably described and handsomely illustrated in the work before us, should, for at least some portion of the time of pupilage, be so presented to the student as to occupy the major, and not the minor, place in his surgical studies and reflections. A thorough and familiar acquaintance with them will be of great advantage to him in the earlier years of his professional career; and of greater benefit to the community in which he may be called to practice for the whole of his life, than the most consummate skill in the use of the scalpel. The mere cutting part of surgery, after due preparation in the dissecting room, and now and then without this, may be readily picked up; its specious advantages are always more than sufficient to commend it to the attention of the young practitioner; and it is often possessed by individuals of little or no professional skill in other respects. But no one can be an accomplished dresser, or master of all the details of minor surgery, who is not, at the same time, a good general practitioner.

These details, then, should not be left, as they usually are, to be picked up incidentally. The student should be regularly drilled upon them. For, if he has not mastered them before the period of graduation, he rarely, if ever, afterwards masters them at all. We could adduce many instances in confirmation of this remark; and point to more than one among those who are considered to be sapient fathers of the profession, who, in regard to these details, have evinced a

degree of ignorance, which if shown in an hospital dresser of three months' standing, would have been considered highly culpable, or would have for ever afterwards consigned him to the jeers and ridicule of his associates.

In collecting the materials of this volume, Dr. Sargent has made judicious use of most of the works of other surgical writers, that could in any way contribute to the fulfilment of his design, or render his book useful and attractive to the student. Originality, of course, was not to be expected; and has not been attempted. But the mass of materials which are here presented to us, so arranged and systematized as to be of easy reference, is not the less worthy of attention on that account.

The book is divided into five parts. The first part treats of the instruments and materials usually brought into requisition in the various manipulations of minor surgery.

The second part treats of the preparation of bandages, of their application to different parts of the body, and of the several purposes for which they are employed.

The third part is taken up with a full account of all that relates to the apparatus employed in the treatment of fractures; and in describing the various kinds of splints at present in use, or that have recently been recommended. These chapters are worthy of special attention.

The fourth part treats of the mechanical means employed in the reduction of dislocations, and of the modes of applying them.

The fifth part is devoted to what is more especially included under the head of the "operations" of minor surgery, and to other topics therewith associated.

The woodcuts illustrating the whole of these subjects have been selected from the best sources. They are well executed, amount to not fewer than 127, and present one of the most important features in the general plan of the work.

We must conclude this brief sketch by returning our thanks to Dr. Sargent for the trouble he has been at in preparing this useful volume for the benefit of the surgical student. We will adopt it as the text-book for the use of our own pupils, and we must recommend our fellow practitioners in all parts of this country to do likewise.

J. W.

BIBLIOGRAPHICAL NOTICES.

A Dictionary of Practical Medicine; comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, &c. By James Copland, M. D., F. R. S. Edited with Additions. By Charles A. Lee, M. D. Parts XVIII. and XIX. New-York: Harper & Brothers. 1848.

We have received from the publishers Nos. XVIII. and XIX. of this valuable publication. No. XVIII. contains a continuation of the article

on the diseases of the peritoneum, and a very elaborate and finished article on pestilence in its various forms and phases, to which is added an able and exceedingly interesting Appendix by the American editor, from the pen of Dr. P. S. Townsend, on yellow fever, and the diseases of the American army in Mexico, &c., during the year 1847. No. XIX., an article on phlegmasia alba dolens, pityriasis, diseases of the pleura, pleurodynia, pneumothorax, and an unfinished article on poisons. If we may be allowed to judge from the author's *general observations* on this subject, what the remainder of the article, devoted to the considerations of particular poisons, will be, we hesitate not to say, that it will be one of the most complete, and yet concise monographs that English medical literature furnishes.

A Dispensatory and Therapeutical Remembrancer; comprising the entire lists of Materia Medica, Preparations and Compounds, with a full and distinct Version of every practical Formula, as authorized by the London, Edinburgh and Dublin Royal College of Physicians, in the latest editions of their several Pharmacopœias; to which are subjoined copious relative tables, exemplifying approved forms under which compatible medicines, &c., may be extemporaneously combined, &c., &c., &c. By JOHN MAYNE, M. D., L. R. C. S., Edinburgh. Revised; with the addition of the Formula of the United States Pharmacopœia, &c. By R. EGGLESFIELD GRIFFITH, M. D., Author of "Medical Botany," &c. 12mo., pp. 329. Lea & Blanchard: Philadelphia. 1848.

THE voluminous title of this little book clearly expresses the design of the work. In regard to the necessity of such a publication at the present time, the author, in his preface, thus expresses himself: "In the prosecution of his task, the author has been encouraged by the firmest persuasion that a *Ready Reckoner* of the present kind was greatly desiderated." How far the profession will recognise the necessity remains to be seen; for our own part, we think it well adapted to the end designed. The additions by the American editor include the formulæ of the United States Pharmacopœia, which adds much to the value of the work as a reference for the American practitioner.

Botany of the United States, north of Virginia; comprising Descriptions of the Flowering and Fern-like Plants hitherto found in those States, arranged according to the Natural System. With a Synopsis of the Genera, according to the Linnæan System; a Sketch of the Rudiments of Botany, and a Glossary of Terms. By LEWIS C. BECK, M. D., Professor of Chemistry and Natural History in Rutgers College, New Jersey, &c., &c. Second edition, Revised and Enlarged. 12mo., large, pp. 480. New-York: Harper & Brothers. 1848.

BY the preface of this work we learn, that "this volume is intended as a class-book for the beginner, and a convenient manual for the

more advanced botanist." We think both these ends admirably accomplished. Many parts of the work have been entirely re-written, and almost every page amended, in order that it may present a succinct view of the present improved state of botanical science. Yet the original plan of the work, as observed in the former edition, has been carried out in this. The works of Lindley, De Candolle, Torrey and Grey, Darlington and various local catalogues have been freely consulted.

To the botanical student, and also the practical botanist, this work of Dr. Beck's can but prove of great assistance. The merit it possesses will, we have not the least doubt, obtain for it that favorable reception which so clearly marked the former edition. We warmly commend it to the attention of both teacher and student of botanical science.

Loiterings in Europe, or Sketches of Travel in France, Belgium, Switzerland, Italy, Austria, Prussia, Great Britain and Ireland, with an Appendix containing Observations on European Charities and Medical Institutions. By JOHN W. CORSON, M. D. 12mo., pp. 397. New-York: Harper & Brothers. 1848.

THIS is a very amusing little volume. It contains many pretty sayings which will please the reader much. The work contains forty-nine chapters, devoted to the non-professional observations of the author. An appendix containing two lectures on European charities and poor; and a letter on foreign hospitals and schools of medicines. It is not, however, a work which even admits of an analysis in our pages. Still, after all, we cannot say that we admire the taste which leads to the making of books of this class. We see no good reason why a medical man should collect his non-professional fugitive correspondence from a newspaper, and even with additions, republish it in the book form, to the public at large, under his personal cognomen. The motives, however pure, are open for question. Works of a medical character, devoted to the consideration of medical topics, and intended principally for the profession, when appearing under circumstances much like the present, we cannot but admire. The redeeming character of the present work, in a professional point of view, we find in the Appendix; the perusal of which will, we have no doubt, prove interesting and instructive to the medical reader.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

A Card.—Owing to a pressure of other engagements the connection of the subscriber with the Editorial Department of the New-York Journal of Medicine and the Collateral Sciences, ceased with the last (May) number. In retiring from a position which he did not seek, and which he reluctantly consented to occupy—one, moreover, which has brought with it more of care and responsibility than he anticipated, he would do injustice to his feelings did he not embrace the opportunity of expressing his gratitude to those who have aided by their communications, or in any way contributed to sustain the interest of the work while under his charge. Whatever may have been his failings, and he doubts not they have been numerous, he can only say, that he has at all times endeavored to lose sight of private and personal interests, and consult those only which pertain to the profession and the public generally. He has aimed to support the rights, the dignity, and the interests of that noble profession, of which he is an humble member, and if the measures he has advocated do not contribute to that result, it is an error of judgment which he trusts is venial. Knowing its impossibility, he acknowledges he has never aimed to please all, and had he succeeded in doing so, he would have forfeited his own self-respect, as well as that of those whose good opinion is of any real value. If he has not done all that was expected, he has done what he could, *non omnia, possumus omnes.* On reviewing his Editorial labors, therefore, while he find some things to regret, he sees no especial reasons for doing penance. He claims to have carried out the programme and abided by the platform which he laid down when he first took possession of the Editorial chair. That his efforts have not been altogether unsuccessful is proved by the constantly increasing list of subscribers, which has nearly doubled during the last year. Of the standing and reputation of the Journal, both at home and

abroad, it does not become him to speak; suffice it to say, that they are entirely satisfactory to its friends and its proprietors. While, then, he hands over the work and the hard-earned results of his experience to his successor, he can only express the hope that it may long continue to flourish and contribute in a good degree in advancing the interests of science and humanity.

CHARLES A. LEE.

[For the publisher's notice in relation to the future management of the Journal, see Notice to Readers and Correspondents.]

CROUP, OR LARYNGITIS MEMBRANACEA, TREATED BY THE USE OF ARGENTI NITRAS.—The topical application of nitrate of silver to the glottis and larynx in this affection, has already acquired something of a professional notoriety. Within a few months past eight cases* have been reported in the different Medical Journals and transactions of Societies, and two have been related to us, the authenticity of which we can vouch for—in all of which recovery has taken place. It is no more than justice, however, to state, that in some of these cases the use of the nitrate was not alone depended upon. Antiphlogistic treatment in four cases, consisting of the use of repeated doses of calomel, and the occasional exhibition of antimony, in some form, sufficient to produce nausea was, during some period of the affection, resorted to. The recovery of ten cases of genuine croup (as they all claimed to have been) under one plan of treatment, is a new feature in the therapeutics of this disease, and should at once claim the attention of the profession.

It appears from a review of the history of these cases that the disease was confined to the *tonsils, glottis* and *larynx*. In all cases when the inflammation is confined to these parts, we deem the treatment not only feasible but justifiable from the first. But in cases where by extension the trachea, bronchia and lungs are implicated, like the operation for tracheotomy, but little if any good can result from its use. Believing as we do that the pathology of this affection consists in inflammation, primarily seated about the epiglottis or in the larynx—tracheitis and bronchitis being secondary complications,

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* Two cases by Dr. W. N. Blakeman, *vide* this Journal, Vol. 8, p. 209. One by Dr. T. R. Varick, *vide* this Journal, Vol. 10, p. 72. One by Dr. C. E. Ware, in Boston Med. & Surg. Jour., Vol. 37. One by Dr. A. C. Post, in Rep. Proc. of N. Y. Med. & Surg. Soc., *vide* Annalist, Vol. 2, p. 285. One by Dr. P. Van Buren, in Trans. of N. Y. State Med. Soc., 1848, Appendix, p. 68. One by Dr. S. Bryan, in Medical Examiner, June, 1848, p. 342. One by Dr. Aldrich, in Boston Med. & Surg. Journal, Vol. 38, p. 94.

our readers will readily recognise the propriety of early resorting to the treatment, which the success of these cases wafrants us in recommending to their consideration. These therapeutic indications are still further confirmed by the recognition of the general law enunciated by Hasse, in his Anatomical Description of the Diseases of the Organs of Circulation and Respiration, viz., "Exudatory inflammation, appears in the respiratory passages, to spread invariably from above downwards, never in the opposite direction." Failing to resort to it early and thus not to recognise the light thrown upon the treatment of this almost universally fatal malady, by the recent investigations in pathology, we have not the least doubt that the treatment of membraneous laryngitis, or croup, by a strong solution of the nitrate of silver will fail in success as frequently as tracheotomy did in the hands of M. Amusat, Blandin, Roux and Baudelocque. The judicious physician will readily see the propriety of conjoining appropriate antiphlogistic treatment, which must be adapted to the exigencies of individual cases in order to secure, we apprehend, the greatest possible success.*

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Adulteration of Medicines, and the late Act of Congress. —Since the publication of our last number, the memorial which was first drawn up by the College of Pharmacy of this city, and seconded by almost every medical association in the country, has resulted in the passage of a law regulating the importation of drugs and medicines. Great credit is due the College for its untiring and united action in this matter, and we are extremely gratified that we are able to present the readers of the Journal, with extracts from the able report of the select committee of the House of Representatives, "On Imported Adulterated Drugs and Medicines, &c." We only regret that want of room prevents us from giving it entire. For a number of years past, and particularly of late, it will be remembered, that strenuous exertions have been made by physicians and apothecaries, through their respective societies, as well as many of the medical journals, (of which we humbly claim to be one of, *if not the first*,) to bring this matter before Congress for some action by

* Great care should be observed in selecting a pure article of the nitrate of silver—the crystals are to be preferred. In the cases reported, the strength of the solution varied, according to the age of the patient, from forty to sixty grains to the ounce of water. The sponge should be soft, conical and securely attached to the whalebone, which may be made of the desired curve by placing it in hot water for a few moments and then holding it in the fingers, for a short time, bent according to the shape wished until it becomes set.

which the *base*, inhuman and *unholy* trifling with the health and lives of our fellow-citizens, might be put a stop to. Our hearty thanks, as a profession, as well as those of the public, are due to the representatives of the thirtieth Congress, for the late interposition of the strong arm of the law. Men whose *total depravity* is so great that they feel "justified" in importing and selling for home consumption, inferior or adulterated medicines, we have no fellowship for, and we rejoice that the time has come, when the majesty of the law has arisen to confound and condemn them. But, while we mingle our congratulations with those of the profession and the community, we must not forget to mete out the meed of praise due those, to whose immediate instrumentality we are indebted for all this. The part taken, and interest manifested in this matter, by Hon R. J. Walker, Secretary of the Treasury, commands our warmest thanks. Almost the first step taken to furnish facts and data, by which this matter could be more effectually brought before congress, was made by this gentleman, in the appointment of a member of the profession, of capability and trust, the indefatigable M. J. Bailey, M. D., to take charge of this branch of customs at this port. How far the facts elicited by the latter gentleman, aided the chairman of the select committee, and influenced the decision of Congress, may be easily seen by reference to the report, extracts from which we have made. To Hon. Thomas O. Edwards, M. D., chairman of the select committee and author of the report, whose zeal and devotion never appeared more conspicuous, and who in the discharge of the important duties incident to such an appointment, labored incessantly and arduously until the end was honorably and legitimately attained by the passage of the act, are the profession deeply indebted. Those only who know and, have seen can fully comprehend the talent, time and perseverance necessary to secure the passage of a law like the present. Dr. Edwards, in this "labor of love," has proved himself a bold and successful champion of the rights of the medical profession. To Senator Dix and others of that distinguished body, as well as to congress generally, are the profession, as well as the public, indebted for the prompt and almost unprecedented manner in which this most important measure was met and successfully disposed of. We are pleased to learn that Dr. Bailey, who rendered such essential service to Dr. Edwards, has been appointed examiner for the port of New-York. This we conceive but an act of justice, and we can but believe that his watchfulness and impartiality will only be equalled by the zeal he has manifested for the interests of our common profession. Under the head of Materia Medica and Pharmacy will be found ex-

tracts from the report of the committee, and the act of congress relating to spurious and impure drugs.

ANCIENT MONUMENTS OF THE MISSISSIPPI VALLEY.—We have been politely favored by Drs. E. G. Squier and E. H. Davis, the authors of this splendid and original work, with a copy of the proof-sheets, amounting to over 300 pages, imperial quarto, and illustrated with beautifully-executed wood-cuts, representing in a graphic manner the antiquities therein described. When completed, we are informed, it will comprise not far from 600 pages of letter press, illustrated by upwards of 50 quarto plates and more than 200 engravings on wood, all executed in the best style of the art. It will include plans, from actual surveys, of more than one hundred and fifty ancient earth and stone works, with plans, sections and views, illustrative of the present appearance, position, structure, contents and purposes, of the several varieties of aboriginal mounds and pyramids, together with the implements, weapons, ornaments, sculptures, &c., found in the mounds.

This great work, which constitutes the first volume of the "Smithsonian Contributions to Knowledge," and published at the expense of that Institution, is the result of the joint labors of two most worthy members of our profession, and is alike honorable to them and our common country. That it is the most important addition yet made to American Archæology is conceded by those who have had an opportunity of examining the works, such as Dr. Morton, Prof. Ed. Robinson, G. P. Marsh, P. R. Bartlett, &c. We regret that our limits in the present number do not permit us to give a more detailed account of its contents; we can only commend it to our readers and the profession generally, as in the highest degree worthy of their patronage.

PATHOLOGY AND PRACTICAL MEDICINE.

ON THE ENDEMIC GASTRO-FOLLICULAR ENTERITIS, OR "SUMMER COMPLAINT" OF CHILDREN AS IT PREVAILS IN THE UNITED STATES. By *Edward Hallowell*, M. D., Fellow of the College of Physicians of Philadelphia, Member of the Academy of Natural Sciences, &c.

The following article on cholera infantum, from the American Journal of Medical Science for July, 1847, we have thought of sufficient interest to be given entire. In making our selections from the domestic or foreign medical press, we wish not to be understood as endorsing thereby the views of the writer of the article selected.

At this season of the year when the gastro-intestinal canal of children is particularly prone to diseases of a severe and frequently fatal character, we have thought that we could not devote a few pages of the Journal more appropriately than to the subject on which this article treats.

It is believed that the analysis of the treatment given by the writer for the several stages of the disease will be found successful; but his views in regard to some points of its pathology admit of doubt. *The cases contained in the article we are compelled to omit.*

Cholera infantum, or the "summer complaint" of children, has been considered peculiar to the United States. Billard, in his diseases of infants, alludes to its occasional appearance in Paris. In the United States it prevails to a great extent, and the mortality from it is extreme. It occurs in all our large cities, carrying off several thousand children annually; it commences in the Southern States in May, and in the Middle and Western, about the beginning or middle of June, and continues until near October, the greater number of cases being observed in July and August. It is found chiefly in the lanes and alleys of our large cities among the poorer classes of society, but those in the higher ranks are by no means exempt from its attacks. It is stated by Dr. Condie, that during a period of fifteen years, from 1825 to 1839 inclusive, 3352 infants perished of this disease in Philadelphia, being almost ten per cent. of the whole number of infants under five years who died during that period. In St. Louis, Mo., during the years 1841, 1842, and 1843, 238 children died of it. In 1823, 253 died of the same complaint in Baltimore. The average number of deaths annually in Philadelphia is about 200. The disease is confined almost exclusively to children between four and twenty months of age; cases, however, occur as early as the age of two months, and as late a period as three or five years.

Causes of the Disease.—Cholera infantum is considered to be dependent for its production upon a heated, confined, and impure atmosphere, acting "directly upon the skin, and indirectly upon the mucous surface, at a period when the latter is already strongly disposed to the disease from the effects of dentition, and from the increased development and activity of the muciparous follicles which take place at that period." The circumstances of its origin, however, are involved in doubt, and can only be determined by future and more correct observation. The exciting causes are stated by Dr. Dewees to be improprieties in diet and clothing. He observes, also, that it is very often aggravated by worms, but such a complication has not come under our notice.

General Description of the Disease.—Cholera infantum may be divided into three stages, based upon its anatomical characters. In their description we shall be guided chiefly by the results of our own observations.

Symptoms of the First Stage.—This usually commences with diarrhœa, succeeded by vomiting, or with vomiting and purging; these symptoms are soon followed by fever of a remittent type, with evening exacerbations; the pulse is small, quick and frequent, occasionally full, and sometimes tense; the brain is often affected sympathetically; this condition is manifested by a tendency to delirium; the eyes have a fierce and wild expression, and the face is flushed; the stools in this stage vary much in consistence; at times they are thin and watery, but often pasty or mush-like; their color also differs greatly in the course of the day, and from one day to another; in a number of cases they presented the appearance of chopped egg, upon which boiling water had been poured; occasionally they consisted almost entirely of mucus. The period at which the vomiting is observed varies; it occurs usually on the second, but often as late as the fourth or fifth day; in some instances there is no vomiting throughout the course of the disease; in one case it did not make its appearance until a few days before death; the matter vomited consisted of the contents of the stomach, which were returned almost immediately after their entrance into it; in infants at the breast the milk was returned in a curdled state, having an acid smell; in one instance it had the appearance of coffee grounds; the vomiting occurred for the most part three or four times a day, and sometimes oftener.

Temperature of Surface.—The skin was occasionally moist, more frequently

dry, warmer upon the head and abdomen; the latter is mostly warmer than the rest of the body, and often decidedly hot; the temperature of the extremities is natural, or more generally cool; occasionally it is warm; sometimes the lower extremities are cool while the upper retain their usual heat. The *respiration*, except in those cases complicated with other diseases, as whooping-cough or measles, was free, with the number of respirations in the course of a minute amounting to 20, 24, 28, 29, 30, 33, 36, 40, 44, 48, 53, 55 56, 60, 64, 66. When over 30 the respiration was more or less interrupted. The *tongue* in this stage was observed to be moist, but was often red at its tip and edges, and coated at its base with a yellowish or brownish yellow fur.

The *countenance* in the early stage, except when the attack was violent, was good, the eyes being bright and animated; occasionally the child would fall into a sleep from which it was easily roused. There was usually a considerable degeee of irritablity and restlessness, the little sufferer being pacified with difficulty. The sleep was often disturbed. The abdomen was occasionally tense and tumid, and somewhat painful on pressure; the thirst was often intense; it now and then happened, however, that drink was refused.

Anatomical Characters.— These consist in an undue development of the follicles both of the stomach and intestines, or of one of those organs, without inflammation of the mucous membrane. Children rarely die of cholera in the early stage; opportunities, therefore, seldom occur of observing the morbid appearances. M. Billard, who had ample opportunities for the study of the diseases of children at the Hôpital des Enfans Trouvés of Paris, states that he had seen isolated follicles and follicular plexuses of the intestinal tube in considerable numbers and developed without being inflamed in twelve infants; three were aged from eight days to three weeks, two aged two months, the remaining seven were from nine months to one year; the symptoms of the cases he has published correspond so closely with those of cholera infantum, that, to use the language of Dr. Horner, it is evident that had they occurred in this country, they would have been named, and in fact are, cases of cholera infantum. M. Billard states, that most of these children had arrived at the period of dentition, so that there appeared to be a remarkable coincidence between the appearance of the teeth, and that of the organic development of the follicular apparatus of the intestines, the follicles performing an active part in the process of digestion by furnishing the surface of these organs with a fluid which, in all probability assists in the elaboration of food. Dogs, he observes, and other carniverous animals remarkable for their digestive powers, possess this apparatus in a high degree of development. In a lioness which died in this city some years ago, and of which I had the opportunity of making a post-mortem examination, the isolated follicles of the intestines were one-fifth of an inch in diameter.

The follicles are sometimes found to exist in great numbers from the first period of life, but in general they are not very numerously developed, except at the period above mentioned, or at a still more advanced age. (Billard.) Rœderer and Wagler, in their work *De Morbo Mucoso*, in which they describe the symptoms and anatomical characters of a gastro-follicular enteritis that prevailed in Gottingen in 1760 and 1761, give very beautiful and accurate drawings of the mucous follicles in a state of abnormal development.

The muciparous glands of the mucous membrane are, it is known, of two kinds, the isolated and the agminated. The isolated follicles are found both in the stomach and intestines, but are much more abundant and less uniformly developed in the former than in the latter; the agminated follicles or glands of Peyer occupy the free border of the intestine; these are rarely affected in cholera infantum. The isolated follicles are found less abundantly in the jejunum, than in the other portions of the small intestine. They are usually about the size of a pin's head, and have not inaptly been compared by Dr. Horner to grains of sand sprinkled over the surface of the intestines. They are elevated above the surrounding surface of the membrane, and have each in their centre a small grayish point. They consist simply of a duplicature of

the mucous membrane, and are readily effaced by passing the handle of the scalpel over them with some force; on cutting them open they are found to contain a small quantity of fluid. These glands receive each, according to Leiberkuhun, Meckel and Beclard, an artery, a vein and a nerve. They occupy both the summit and the interstices of the valvulæ conniventes, and are found disseminated over every part of the intestine, both upon the free and attached surface. (See case of Charles Morand, in Billard, *Maladies des Enfans*, and of Marie Boulefray, in the work of the same author, entitled "*De la Membrane Muqueuse gastro intestinale dans l'état sain et dans l'état inflammatoire, researches d'anatomie pathologique sur ses divers aspects sains et morbids.*" Paris, 1825.)

"*Treatment.*—We have thought it proper to intercalate with our own, the opinions of older and more experienced members of the profession, more especially those of Dr. Chapman, Professor of Practice in the University of Pennsylvania. His acute perception of *symptoms*, appears to have impressed him more fully than most others with the importance of depletory measures in the treatment of this disease. *Preventive means.*—In the beginning of June examine the condition of the gums of the child, and if swollen, lance them and send it into the country. A part of the country should be chosen which is elevated, where the air is pure and dry, and where there are no large streams nor stagnant water. Chestnut Hill, in the vicinity of Philadelphia, offers superior advantages in this respect. If it be impossible to remove the child to the country, especially if the apartments of its dwelling be not fully and freely ventillated, let it be carried into the open squares of the city, or taken frequently across the Delaware in the afternoon. The sleeping apartments of children should be large and well-aired. They should sleep upon a mattress or blanket folded upon the floor of the room or crib, and the covering should be light; they should be immersed in a cold bath at least once a day, or be freely sponged in cold water; the mortality among the children of Philadelphia is said to have greatly diminished since the introduction of the Schuylkill water; the child should be confined to the mother's breast, care being taken not to overload the stomach, indeed itoften happens that the breast is given to the child when it requires only drink; the stomach then becomes distended and vomiting often ensues. Attention during the first year should be paid to the diet of the mother; she should avoid articles of a flatulent or indigestible character. Dr. Parrish recommends as a preventive means, when predisposition to cholera is suspected, the occasional use of nutritious animal fluids; the sucking of small pieces of salt meat, as ham or dried beef, he observes, will sometimes be found productive of advantage. With the same view of giving tone to the stomach, he recommends that aromatics, as ginger tea, be used habitually during the summer, in those cases in which there is strong reason to apprehend the occurrence of cholera. This treatment may possibly be applicable under certain circumstances, as in the case recorded by him, but as a general rule we are not disposed to recommend it. Indeed, he himself observes, that it is applicable in all its details only in those in whom there is every reason to apprehend that the only alternative is between almost certain death and the most careful prophylactic treatment.

Treatment of the Firs Stage.—We have seen that the first stage consists chiefly in an abnormal development of the mucous follicles of the stomach and intestines. This, as observed by M. Billard, is not properly speaking, true inflammation, being rather an intermediate stage between the normal state, and the state of inflammation. The follicles are simply in an excited condition, induced as there is reason to suppose, by the powerful influence of heat combined with malaria, acting upon the nervous system. The object of treatment, therefore, is to subdue this excited condition, and to restore the healthy state of the skin with which, and the mucous lining of the alimentary canal, there is a powerful sympathy. The functions of the liver, it is probable, are more or less impaired, but of this we have no direct evidence. If the child be

not weaned, it should be confined to the mother's breast, care being taken to avoid overloading the stomach, thus adding to the irritation which already exists. If weaned, it should be confined to milk and water, rice, barley, gum, or toast-water. The infusion of the benne leaf, (*sesamum orientale*,) is also employed in this city, and is a useful remedy. The gums should be carefully examined and lanced if swollen. The most important point of treatment, however, is early removal to the pure air of the country. This should be done as soon as the disease has declared itself. Dr. G. B. Wood, Professor of Materia Medica and Pharmacy in the University of Pennsylvania, states, that during the whole period of his practice, (nearly thirty years,) but one case occurred to him, so far as he can recollect, of a fatal termination of this disease, when the child had been sent into the country in the early stage of it. (Pract. of Med., vol. i. p. 673.)

Blisters behind the ears have been highly recommended at this period of the disease, and we believe the practice is attended with decided advantage. Dr. Parrish was the first to suggest them. They should be applied immediately. The advantage arising from the early application of blisters behind the ears is confirmed by the late Dr. Eberle, a distinguished practitioner of this city, favorably known by his writings on the management of children. He observes, "during the last seven years, I have treated but few cases in which I have not at once applied blisters behind the ears, and I may confidently affirm, that since I have adopted this practice, I have been much more successful in the management of the disease than formerly. Their good effects arise, no doubt, from the counter-irritation they produce." The warm bath should be administered every night and morning, and the child on coming out be gently rubbed with a piece of soft flannel; should there be much cutaneous sensibility, a portion of salt and mustard may be added to it. With a view of allaying the vomiting, various remedies have been employed. Injections of salt and water have been recommended by Dr. Dewees. Lime-water and milk, and the neutral mixture may be used for this purpose. Dr. Chapman states that he has found the irritability of the stomach most effectually allayed by lemonade in doses of a teaspoonful frequently repeated. It should be made pretty sour. Great advantage may also be derived from the frequent use of Seltzer or soda water. Dr. Parrish was in the habit of recommending it to be put up in ℥ss phials, the contents of one of which to be given at a draught. The soda powders may also be employed. Chicken-water was also directed with the same view. Stimulants, as strong coffee, sulphuric ether, turpentine, &c., are objectionable. Dr. Condie states, that when the irritability of the stomach has been excessive he has rarely failed in allaying it by the administration of the acetate of lead, in solution according to the following formula. ℞.—Aq. puræ ℥j; acet. plumb. grs. v; acid acet. impure. m. v; sacch. alb. pur. ʒiij. Sig. A teaspoonful may be given every hour or two until the vomiting be suspended. We have been in the habit of directing the blue mass mixed up with gum arabic, with a view of overcoming the irritable condition of the stomach, and usually with success, or small doses of calomel, (1-12th of a grain every two or three hours, either alone or in combination with a very minute quantity of opium, 1-16th, 1-20th, 1-30th, 1-40th of a grain.) The blue mass may be given as follows: ℞—Mass. ex hydrarg. grs. iv; g. acaciæ pulv.; sacch. alb., aa ℥ss; aq. ℥iss. M. Sig. A teaspoonful every hour.

If the vomiting be obstinate, a Cayenne poultice or small blister may be applied to the epigastrium. Should the disease continue, we next have recourse to small doses of calomel and ipecacuanha in doses from 1-12 to 1-6 of a grain of the former, and from ¼ to ½ a grain of the latter, every two or three hours; advantage may sometimes be derived from substituting a small quantity of Dover's powders, (from ¼ to ½ a grain.) for the ipecacuanha. We should be extremely cautious, however, in the use of opiates in this, or indeed in any stage of cholera infantum. Benefit may be also derived from the application of a bread and milk, or mustard poultice over the whole abdomen, or as advised

by Dr. Eberle, a poultice composed of two or three tablespoonfuls of powdered black pepper, with a few teaspoonfuls of Cayenne mixed up with a common poultice. Embrocations to the abdomen and the lower extremities, with spirits of camphor, may also be used with advantage. Should there be symptoms of acidity, which may be ascertained by testing the stools with litmus paper, a few grains of magnesia may be given, and should the discharges continue so as greatly to debilitate the patient, two or three grains of prepared chalk may be added to the prescription of calomel and ipecacuanha. We cannot, however, protest too strongly against the injudicious use of astringents in this or any other stage of the disease. We once witnessed a case in which cerebral symptoms of an alarming character supervened in consequence of a sudden arrest of the alvine discharges by means of the chalk mixture, and the child's life became a forfeit.

Second stage —The vomiting which, in the commencement, was more or less frequent, now occurs but seldom, while the diarrhœa continues; the stools vary much in appearance, but are more or less bloody and painful: there is also much restlessness, and the child is observed to draw up its limbs at the time of the discharge; the predominating color of the stools is dark green, looking like chopped spinach; the color, however, is occasionally lighter, but mixed with portions of a darker hue, or with lumps of yellow more or less curdled. They are often of a bright yellow or chrome color, or of a dark brown or chocolate color, caused by the admixture of grumous blood. The appearance of the stools varies much in the course of the day, the change of color probably depending upon the greater or less quantity of bile and acid in the intestines; the abdomen is more or less tumid and painful on pressure; tenderness of the abdomen, with drawing up of the limbs, and bloody discharges are the most important signs in this stage of the affection; the temperature of the abdomen is usually elevated, while that of the extremities is cool; the pulse is small and feeble, or it is frequent and tense; occasionally it is intermittent; as the disease advances, the emaciation already observed progresses, the skin about the neck and thighs hanging in folds; the eyes become sunken in the orbit, and each is surrounded by a dark areola; the nose is sharp, and the lips are shrivelled; the feet become œdematous, and the cutaneous sensibility is so much impaired that flies collect upon the face without causing any uneasiness; petechiæ are occasionally observed at this period; the tongue is dry and incrusted and covered with aphthæ, and deglutition is now more or less painful; the child is often observed to thrust its fingers far back into the mouth from dryness of the fauces; the appetite becomes greatly impaired, and there is almost constant thirst. Dr. Dewees mentions the eruption of a quantity of minute vesicles upon the chest, which he considers a fatal sign. Dr. Condie states that he has known many instances of recovery, even when the eruption has been most extensive and distinct. We have observed it but in a single instance; the eruption, however, was not confined to the chest, but occurred in other parts of the body. Dr. Chapman speaks of the appearance of pink-colored stools as a fatal symptom; this does not correspond with our own observations.

Anatomical characters of the second stage.—These consist essentially in inflammation with softening of the mucous membrane and ulceration of the follicles, more especially of the large intestine. The mucous membrane of the stomach in many case presents its usual appearance and consistence; in others it is more or less injected and softened, the softening extending occasionally to all the coats, resembling the condition described by Cruveilhier as characteristic of the disease termed by him *maladie gastro-intestinale des enfans*, and by Jæger, Gairdner, and others, softening of the stomach.

Rilliet and Barthez in their work on the diseases of children, notice the correspondence between the symptoms of softening of the stomach as described by Jæger, and those of cholera infantum; but an examination of the cases recorded in this paper will show that this condition of the organ is but rarely ob-

served. The lining membrane of the stomach is not unfrequently covered with a layer of whitish opaque mucus easily scraped off with the handle of the scalpel; the mucous follicles both of the stomach and intestines are more or less apparent; the mucous membrane of the small intestine is occasionally softened, and for the most part pale in the greater portion of its extent, contrary to the statement of Dewees and others, who consider the small intestine as being the exclusive seat of the disease. In one case the portion of intestine inflamed, (the lower portion of the ileum,) presented a brick-dust color interrupted with alternations of a pale yellow, mottled with red in some points; minute vessels were seen freely inosculating with each other; in other portions the inosculations were less distinct, there being a uniform reddish tinge. In another it was of a dull red, or brick-dust color, minutely injected with red vessels, and in several points, especially upon the surface of the valvulæ conniventes, presented a dotted appearance; it occupied a portion of the intestines four inches in extent from the pylorus. In another case, the duodenum at its upper portion presented a slight shade of pink, with a few minute arborizations, and in several other instances there was a slight degree of inflammation affecting the duodenum at its upper extremity. There was also a slight inflammation of the glands of Peyer in one or two cases, but for the most part they presented nothing remarkable. The small intestines contained a considerable quantity of orange-colored mucus. The large intestine was more or less inflamed and softened in almost every instance; the inflammation existed in the form of bands, and presented a dotted arborescent appearance; in one case these bands were longitudinal: they were five or six inches in length, and several lines in breadth; in another case the bands were about two inches in length, having a minutely arboriform appearance, and were of a deeper red than the surrounding membrane; the first was situated one and a half inches from the cœcum, the second six inches from the first, and extended nearly the whole circumference of the gut; it was three inches in length and very minutely injected, but not so much as to destroy the arboriform arrangement. In most of the cases the redness was diffused with occasional ramifications; in one instance the inflammation occupied the whole extent of the colon; it was of a vivid red throughout, and the membrane was much thickened. The inflammation was here also for the most part diffused, or in the form of bands occasionally presenting a ramiform appearance, the minute vessels freely inosculating with each other. From the margin of the follicles minute vessels were seen to radiate to the surrounding membrane, occupying the entire surface of the intestine, showing that the inflammation commenced in the follicles and extended subsequently to the mucous membrane. The follicles were often found to be more or less ulcerated, the ulcerations sometimes extending as far as the muscular coat; the ulcerations were more numerous and penetrated more deeply in the rectum than in other portions of the intestine; it was often completely riddled with them; we have not observed the surrounding membrane to be implicated to any extent; the mucous membrane was more or less softened in the greater number of cases; in one instance it was thickened; the membrane in this case was intensely inflamed. The coats of the intestine were covered with a layer of mucus, sometimes so thick as to diminish considerably its calibre. It ordinarily contained a quantity of grayish-colored fæces of the consistence of gruel. The lungs presented nothing remarkable but a slight engorgement posteriorly, except in three cases, one of which was complicated with measles, and the remaining two with whooping-cough; in these cases the usual appearance of lobular pneumonia was present. In one case the patient had been attacked with pleurisy in consequence of exposure to the night air; at the autopsy a considerable quantity of pus was found effused in the cavity of the right pleura, and the lung was more or less disorganized. The peritoneum presented its usual healthy color in all the cases observed; the liver was greatly enlarged in but a single instance, contrary to the statements

of most authors who affirm this to be uniformly the case, the gall-bladder was more or less distended with dark-colored bile staining the finger a deep yellow; the mesenteric glands were not enlarged; the spleen and kidneys presented nothing remarkable. In nearly all the cases the veins of the pia-mater were more or less distended; the arachnoid was pale and moist, except in one case in which there was a slight opacity at the base of the brain; there was more or less effusion in the sub-arachnoid cellular tissue, for the most part limpid; occasionally it presented a whitish, opalescent or citron-colored appearance; the pia-mater was more or less injected, but the injection for the most part appears to have been confined to the larger ramifications; it was easily removed by traction from the surface of the brain; the substance of the brain presented its natural appearance except in two cases, in one of which the central, and in the other both the central and the cortical portions were injected; it was softened in four of the cases; there was little or no effusion in the ventricles; in one instance the lateral ventricles appeared to be quite dry, as if wiped with a cloth.

Treatment.—We have seen that the second stage is characterized chiefly by tenderness of the abdomen on pressure, drawing up of the limbs, and bloody stools, symptoms which depend upon inflammation of the mucous membrane, more especially of the large intestine. The treatment, therefore, in this stage should be antiphlogistic. There can be no doubt, we think, that the mortality from cholera infantum has arisen in a great degree from not keeping its inflammatory character sufficiently in view. We have found inflammation of the mucous membrane of the large intestine in every autopsy that we have made, and evidence of its existence in an advanced stage of the disease clearly demonstrated in all the published cases that have come under our observation.

The chief object of the present essay, indeed, is to direct the attention of the profession to the above fact, and to the importance of antiphlogistic treatment, instead of the purgative plan usually pursued and with such fatal results. When the abdomen is distended and painful on pressure, with a tense, frequent or full pulse, v. s. should be resorted to. This is occasionally required at the commencement of the first stage, when there is much cerebral determination; should v. s. not be sufficient to remove the inflammatory condition, or when the state of the pulse does not indicate it, leeches or cups are to be applied to the abdomen; we have not been in the habit of directing cups in this affection, but from the great benefit which we have seen result from their use in the lobular pneumonia of children, we have no hesitation in recommending their employment. Mothers naturally object to what they conceive to be a harsh remedy, but by persuasion they can generally be induced to submit to it, and the great advantage we have uniformly derived from their employment in the last-mentioned disease, we think warrants their use in this. The amount of pain is much less than is supposed, and the quantity of blood is more suddenly and effectually extracted than by leeches, besides which there is no risk of subsequent hemorrhage. One, two, three, or four cups may be applied to the abdomen, and repeated should pain on pressure or the bloody discharges continue. It should be remembered that the reaction in children is seldom great, and that the most intense inflammation of the mucous membrane may exist, while the temperature of the skin is but little elevated; or may be quite cool, and the pulse feeble. Stimulants in these cases are too often given, and may destroy the patient; the true course is to pursue a cautious antiphlogistic treatment, supporting the patient at the same time by the blandest articles of nourishment. It has been advised to apply leeches to the anus, and this may occasionally be done with advantage. Injections of cold water or iced water, as the severity of the case may require, are recommended by Dr. Miller of New York, and we believe with great propriety. The remedy, he observes, though generally advisable, appears to be best adapted to that period of disease when the alimentary canal has been previously well emptied of its acrid and

offensive contents. Should there be reason to suppose the existence of such accumulations, the discharges being watery and mixed with indigestible food, with a tumid state of the abdomen, a grain of calomel may be given every hour or two until the bowels are disturbed. We have observed that the small intestines are but little affected in this disease, and we should think, therefore, that no objection could be made to the use of mild laxatives for this purpose, the treatment being the same as in dysentery. Castor oil, the oleaginous mixture in small doses, or the oil of butter, may also be employed. Injections of the liquor plumbi subacetat. dilut. (℥j to a gill of water) are also productive of benefit, or the acetate of lead, in the proportion of five grains to a gill of water, for a child of two years. The internal remedies should be small doses of calomel and ipecacuanha as prescribed in the first stage. or the same dose of calomel combined with ¼ to ½ a grain of Dover's powder every three hours. It may often be advantageously associated with acetate of lead to the amount of from one-sixth to one-fourth of a grain, but we believe this remedy better adapted to a more advanced period of the disease. When there is much irritability, and the skin not perternaturally dry, the ext. hyoscyam. may be substituted for the Dover's powders. Emetics we consider decidedly objectionable in every stage of cholera infantum, notwithstanding that they have been recommended by high authority.

It will be observed that inflammation with ramollissement of the mucous membrane of the stomach, exists in a large proportion of cases, and emetics under such cases must be decidedly injurious. With regard to purgatives the same objection applies. *Laxatives* may occasionally be proper when there is reason to suspect the accumulation of irritating matters in the intestine, and of them the best, as above mentioned, is calomel either alone or in combination with a small quantity of Dover's powders (¼ to ½ of a grain,) and followed by a dose of castor oil. We cannot too strongly urge upon the young practitioner the necessity of caution in the use of opium in this disease, or indeed in any other in which there is a determination to the head. The warm bath is a useful remedy, unless the child be too debilitated; he should be immersed in it up to the neck, and cloths wrung out of cold water applied at the same time to the head, in order to lessen the determination to the brain. Should the application of cups or leeches to the abdomen not be sufficient to remove the inflammatory symptoms, and the pulse be feeble or the patient much exhausted, blisters may be resorted to, but great care should be exercised in their employment lest gangrene ensue. We have seen very troublesome consequences arise from the application of blisters to children, and in one instance we think the child lost its life from their imprudent use. They should never be suffered to remain more than three hours, and after their removal, a large emollient poultice should be applied over the whole abdomen. Should there be symptoms of cerebral congestion manifested by stupor, rolling about of the head, or a disposition to coma, cloths wrung out of cold water, or vinegar and water, or a mixture of equal parts of lead water and spirits of wine should be applied to the head. Should these symptoms continue, leeches in small numbers may be applied to the temples or behind the mastoid processes. Counter-irritation should also be made by stimulating pediluvia, or the application of sinapisms to the extremities.

Cholera infantum not unfrequently becomes chronic, the symptoms being very much the same as those of ordinary diarrhœa, or the patient may sink into a typhoid state. The remedies in this case consist of the warm bath, to which salt, mustard, brandy or Cayenne pepper may be added, counter irritating applications to the abdomen, and the internal use of mild astringents. When the diarrhœa is such as to exhaust the patient, the cretaceous preparations may be cautiously employed, great care being taken not to arrest the discharges too suddenly.

The following prescription has been proposed by Dr. Parrish for that purpose. ℞.—Potassæ sub-carb, ℈j; gum acaciæ, 3j; tr. opii, gtt. vj; aq. cin-

nam. ʒiss; sacch. alb., 3j. M. A teaspoonful to be taken every two or three hours. Should this not be sufficient, the following may be employed. ℞.—Test. ostrear. ppt., 3iss; gum acaciæ, 3j; tr. thebaic, gtt. x; sacch. alb., 3j; aq. pur., vel aq. cinnam., ʒ iv. M. Sig. A teaspoonful every two hours.

Dr. Condie states, that he has derived great advantage from the use of charcoal in chronic cases of this affection, when the discharges were of a dark color, acrid and offensive. He employs it in combination with powdered rhubarb, ipecacuanha, the extract of hyoscyamus, according to the following prescription. ℞.—Carb. ligni, 3j a 3ij; pulv. rhei, ℈ ij; ipecac. grs. iv a grs. xij. M. ft. chrt. xij. Sig. One to be taken every three or four hours. Lime water and milk may also be given in these cases, also equal parts of charcoal and magnesia.

Care ought to be taken not to continue the use of the charcoal too long, as serious accidents are said to have arisen from its accumulation in the bowels. The infusion of soda and hickory ashes is also said to be beneficial. The syrup of rhubarb may be given in doses of from twenty drops to a teaspoonful every two or three hours, or the powder according to the following formula. ℞.—Pulv. rhei, grs. xv; pulv. ipecac. grs. v; magnes. calcinat. grs. xx; sacch. alb. 3j; tr. opii, gtt. x; ol. anis. gtt. v. or gtt. vj; aq. ʒiij. M. A teaspoonful every hour or two (Dr. Chapman). Columbo root in powder or infusion may also be employed. (Dose from two to three grains.) The infusion of the common logwood (*hematoxylon campechianum,*) Dr. Chapman states, was much employed by Dr. Physick in this stage of the disease. The dose is a teaspoonful. A decoction of the bark of the pomegranate root (*punica granatum,*) or of the flowers, is also considered useful. The best of all these vegetable astringents, according to Dr. Chapman, is a strong infusion of the leaves of the dew (*rubus trivilis*) or of the blackberry root (*rubus villosus.*) The dewberry is preferable, from its greater strength. The dose is about a teaspoonful. The alum plant (*Heuchera Americana,*) a common plant in the neighborhood of Philadelphia, has also been highly recommended as an astringent in this affection. Alum, in the dose of one or two grains with a small quantity of opium may also be employed, or the acetate of lead in combination with the same remedy. Dr. Eberle states that in the advanced stage of this disease, he has occasionally derived considerable benefit from the use of the tartrate of iron according to the following formula. ℞.—Ferri tartrat. gr. xi; syr. zingiberis, ʒss; aq. pur. ʒij. M. From twenty to forty drops to be given to an infant four or five times daily. Dr. Chapman advises the sulphate of iron under the same circumstances. ℞.—Ferri sulphat. grs. ij; acid sulph. gtt. x; sacch. alb. 3j; aq. ʒj. M. Dose a teaspoonful as often as necessary. Dr. Meigs has written favorably of a plunging tepid bath made of the infusion of white oak bark. *American Medical Recorder,* vol. iii. p. 507. He states that it produced a rapid amendment in one case in which he tried it, and a perceptible improvement in another. When the discharges from the bowels are small in quantity, thin, dark colored and offensive, with flatulency, the spirits of turpentine may be given. Turpentine in the acute form should never be employed. It is a "deadly remedy." The following is the formula proposed by Dr. Condie. Prescription.—Mucilag. g. acaciæ, ʒiij; sacch. alb. 3vj: spt. æth. nitros, 3iij; spt. terebinth. 3ij; magnes. calcinat. grs. xiij; spt. lavand. comp. 3ij. M. Sig. A teaspoonful three times a day, or oftener when the child is over two years of age. The juniper oil is also considered an excellent palliative for this purpose. Prescription.—Ol. junip. 3ij; sulph. ether ʒss; tr. opii. gtt. xl. M. Sig. From ten to fifteen drops from three to four times daily. The balsam copaiba may also be employed. The dose is from three to five drops. Dr. Parrish states that he has frequently directed an infusion of bark and cinnamon in lime-water in the following proportions. Prescription.—Best bark, coarsely powdered, ʒss; cinnamon 3ij; lime water ʒiij. M. It should be suffered to stand a little while and then decanted; a

dessert spoonful may be taken several times a day. With this remedy we have no experience. The bark jacket is also occasionally employed. Injections of the bark may likewise be given. These remedies should be employed only when the symptoms are of a typhoid character, the vital forces being insufficient to sustain the patient. When the child is greatly exhausted, stimulating frictions to the body with flannels wrung out of hot brandy and water, or whiskey should be used, or if the exhaustion be extreme, it may become necessary to resort to stimulants internally, as wine whey, or a weak solution of carbonate of ammonia. Dr. Eberle states that in these circumstances he has derived great advantage from the tincture of cinnamon in doses of from fifteen to twenty drops in some mucilaginous fluid every four hours. When the discharges are very frequent, attended with great exhaustion, the spirits of ammoniæ aromaticus in combination with chalk mixture is a useful remedy. Dr. Hartshorne, one of the most eminent practitioners of this city, recommends the use of creosote in the advanced state of this disease. The following is a formula he employs. Prescription —Creosote, gtt. j.; test. ostrear. præparat., 3ij.; g. acaciæ pulv. ℥ss.; aq ℥vj. Dose a teaspoonful every two hours for a child two years of age.

Tannin, we would suppose, might also be advantageously employed in the chronic form of the disease when the discharges are abundant. It is said to be less likely to irritate the stomach and bowels than the ordinary astringents. The dose for a child of two years is one-fourth of a grain every three hours, or of the pure tannin one-twenty-fourth of a grain repeated as often.

When there is an aphthous condition of the fauces, Dr. Parrish thinks he has found nothing to do so much good as a gargle of lime-water and bark. Dr. Griffiths, he observes, in some protracted cases of cholera, was in the habit of prescribing scalded lemonade to the child with a very happy effect.

Great attention must be paid to the diet. If not weaned, the child should be confined to the breast, with the occasional use of barley-water, toast, or gum-water. So long as the inflammation is inactive, or when it has subsided or has assumed a chronic form, articles of a more nourishing kind may be allowed, as boiled milk, tapioca, arrow root, or sago, or thin oatmeal-gruel, or flour boiled in milk; the flour should be put in a rag, and then boiled until it becomes hard, and grated. This, we believe to be a most excellent article of diet. We know a remarkable instance of chronic dysentery in the adult, cured by small doses of calomel and opium, and confinement to this diet when all other means had failed. In the chronic form of the disease when the patient is greatly debilitated, the appetite occasionally becomes craving for certain stimulating articles of food, which it may be right to gratify. Dr. Parrish relates several instances of this kind in his lectures. Dr. Wistar, he observes, used to mention the case of a child that was brought to the parlor while the family were at dinner. It was extremely weak, and seemed to be in the last stage of the disease. It showed a strong disposition for some ham which was on the table. The black skin covering the ham was the part which it seemed particularly to desire. It was gratified, and it did not discontinue sucking the piece until it had deprived it of its nutricious juices. From this time it began to recover, and ultimately got well. Dr. Wistar was so convinced of the importance of the above practice that he used to tempt his little patients with small pieces of ham. Some would eat it, others seemed to have no desire for this kind of food. In the latter case he did not press it upon them. Dr. Parrish states that he often prescribed the essence of ham in these protracted cases of cholera. He directs the juice to be bottled up to prevent it from becoming rancid, and to be used as occasion requires. He also relates an instance of a child under similar circumstances that seemed very anxious to eat some butter which was on the table; this child was also indulged, and it continued to devour the butter, lump after lump, until it had made way with the whole. From this time it was allowed as much butter as it desired, and under this plan it recovered.

The same directions with regard to ventillation apply to this as to the first stage.

Third stage.—Symptoms. The symptoms indicative of this stage of the affection are an unusual disposition to drowsiness or stupor, rolling of the head, and chewing motion of the under jaw, succeeded by convulsive movements or rigidity of one or more extremities followed by paralysis. When the disease has progressed thus far, it may be considered almost, if not entirely beyond hope.

Anatomical characters.—These consist essentially, in disorganization of the structure of the brain from softening of its tissue. The softening is sometimes general, but is more often confined either to the cortical substance, or to the central portions of the brain and cerebellum. The softening may exist to such a degree as to cause the brain readily to give way on slight pressure, or its substance may be rendered quite diffluent so as to resemble cream. These effects are the result of long-continued irritation; the substance of the brain when cut into, usually presents numerous red spots from effusion of blood. The pia-mater is more or less injected, and its veins much distended. There is also effusion of serum in the sub-arachnoid tissue, and to a greater or less amount in the lateral ventricles. This, however, is not always the case, the surface being sometimes quite dry.

Treatment.—Notwithstanding the hopeless condition of the patient, it is our duty to make use of such means as afford any, even the slightest prospect of relief. These consist in the application of leeches to the temples and to the mastoid processes, with blisters to the nape of the neck. They should be dressed with mercurial ointment. The treatment in fact is the same as in tubercular meningitis, and we think we have derived more benefit from the use of blisters in that affection, than from any other means. Cloths wrung out of cold water, or of vinegar and water, should be at the same time kept constantly applied to the temples.

Diagnosis.—Cholera infantum may be confounded with tubercular meningitis, or dropsy of the brain. From this, it may be distinguished by the frequency of the discharges, whereas, in the former affection the bowels are usually torpid, and by a proper acquaintance with the natural history of the disease. In tubercular meningitis the premonitory symptoms are such as indicate an affection of the brain; it occurs for the most part in delicate scrofulous children. Cholera infantum commences with looseness of the bowels. In tubercular meningitis, the cerebral symptoms predominate in the commencement. The child is restless and irritable, and complains of acute pain in the head, referring it chiefly to the forehead: the pain is intermittent, and is usually accompanied with a peculiar cry, which has been considered by Coindet and others as pathognomonic; the sleep is more or less disturbed, and there are frequent tossings about of the hands; the head is rolled from side to side, and there is more or less moaning and grinding of the teeth; delirium is almost a constant symptom, and the countenance assumes a peculiar characteristic appearance; this is so marked that even the nurses at the Children's Hospital of Paris, easily recognize the disease. It is only in the advanced stages that cholera infantum can be confounded with tubercular meningitis, when the patient relapses into a state of drowsiness or stupor; which is a prominent symptom of the advanced stage of hydrocephalus, and is often accompanied or preceded by convulsions. Cholera infantum may be confounded with the *typhoid fever* of children. To this affection it bears a close resemblance; it may be distinguished from it, however, by the absence of gargouillement, of the numerous lenticular spots which in typhoid fever usually make their appearance from the sixth to the twelfth day, by the agitation and slight delirium at night; the prominence of the spleen, the character of the fever, which is more intense, and continues beyond the ninth day; and the existence of the sibilant râle, all of which are prominent, although not constant symptoms in typhoid fever.

The resemblance between the two diseases is such that it is often impossible to distinguish them apart. Cholera infantum may also be confounded with softening of the stomach. The similarity between the symptoms of gelatinous softening of the stomach, as described by Jæger, and those of cholera infantum, appears indeed to be striking; the coincidence has been observed by Rilliet and Barthez, who do not describe the latter disease as a distinct affection occurring in Paris. The following are the signs of gelatinous softening of the stomach, as laid down by them in their invaluable work. If a child be taken suddenly with obstinate vomitings which persist, with insatiable thirst, with pain in the abdomen, with abundant diarrhœa; if at the same time it emaciates with rapidity, whilst the gastric symptoms *almost exclusively* predominate, we may then infer a gelatinous softening of the stomach.—(Tom. i. p. 467, Art. *Gastrite et Ramollissement de l'Estomac.*)

Prognosis.—The prognosis in cholera infantum may be considered favorable when the pulse becomes slower, when the temperature is restored to the surface, when the vomiting ceases, and the alvine discharges become less frequent, and more natural; an opposite opinion may be formed when the pulse continues feeble; the surface remains cold; the discharges become very frequent, resembling the washings of meat, accompanied with great uneasiness and jactitation, or a disposition to stupor; should there be rigidity and a partial loss of power of the extremities, the patient may be considered almost if not entirely beyond the reach of art.

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Suppuration after Tapping in Ascites.—Dr. A. Connell, of Georgia, in the May number of the Southern Med. & Surg. Jour., relates a case of ascites in a colored woman, aged 50 years, which had continued more than ten years. He introduced the trocar on the 7th of March, 1841, and drew off between six and seven gallons of *water*. The patient did well; but after two or three years the fluid began to re-accumulate slowly, and on the 5th of March, 1847, she was seized with a violent pain in the right hypochondriac region, which soon extended over the whole abdomen, which had then become enormously distended and was very tender to the touch. He again introduced the trocar and drew off about two and a half gallons of *pure pus*—with very speedy relief from pain. She so far recovered as to be able to walk about the house; but at the end of three weeks her abdomen had again become very much distended, and tapping was resorted to a third time. Four gallons of *pus* were now discharged, every way resembling that drawn off at the previous operation. Some of the matter was also examined by Drs. J. A. Eve and Dugas of Augusta, and pronounced to be "*pure purulent matter.*" The patient was now put under a course of mercurial and diuretic remedies, and recovered speedily and perfectly.

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The Cause of Yellow Fever.—B. Rush Mitchell, M. D., U. S. N., in an interesting letter to his father, Prof. T. D. Mitchell, of Lexington, Ky., published in the May number of the Medical Examiner, advances the opinion that yellow fever cannot originate without the presence of *sea air*.—"Upon this point," says he, "I hold this opinion, which I claim as *original*, that yellow fever cannot exist epidemically without the presence of *sea air*. Marsh miasmata alone and unaided may and does produce fevers of various grades; but unless the individual be exposed to a sea air, he cannot have yellow fever." And he sustains this position by several well-chosen facts. The

writer had considerable experience in the treatment of yellow fever as it prevailed in the Gulf squadron off Vera Cruz in the summer and fall of 1847; and concerning one of its most distressing symptoms, he says: — "For the nausea and vomiting attendant upon the disease, an ethereal tincture of kreosote was almost invariably beneficial. By it I arrested the black vomit itself and procured recovery. The prescription usually employed was,

Kreosote, - - -	gtt. xx.
Eth. Sulph. - - -	℥j.
Spts. Lavend. Comp. - -	℥j.

M. A Teaspoonful every fifteen minutes until the nausea and vomiting ceased."

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Whooping Cough.—Dr. McMurray, in the St. Louis Med. & Surg. Jour. for April, has found the following of great service in the treatment of this distressing affection after healthy secretions of the bowels have been obtained by the use of calomel, ipecac. and rhubarb.

℞ Hydriodate Potassa, - -	gr. vj.
Mucil. Acacia, - - -	℥vij.
Syrup Senega, - - -	℥j.
Tinct. Lobelia, - - -	3j.

M. Dose, a teaspoonful four times per day to a child two years old.

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Iodide of Potassium in Tertiary Syphilis.—Dr. Flagg, in the Charleston Med. Jour. & Rev. for May, 1848, has published some observations principally taken from notes of M. Ricord during the summers of 1846–7. Dr. Flagg remarks:

Iodide of potassium is the remedy specially applicable to tertiary syphilis in all its phases. Its administration may be commenced by a dose of about seven grains, given three times a day. Should neither beneficial nor injurious effects result, the dose* may be increased by seven grains, every three days, until it amounts to four scruples, beyond which it is seldom necessary to go.

When, however, the symptoms are urgent, tending rapidly to the destruction of important parts, or to material interference with their functions, much larger doses are requisite in the beginning. We should, under such circumstances, commence with a scruple three times a day, and may be obliged very much to increase even this. It has been necessary to give as much as an ounce and a quarter in the course of twenty-four hours, before a curative action could be obtained; and even twice the quantity has been given in the same time.

As adjuvants, bitters are very useful, and the patient should be kept on a highly nutritious diet.

It is a very serious error into which some have fallen, in supposing that a patient laboring under tertiary syphilis should be subjected to a mercurial treatment before the administration of iodide of potassium. Tertiary symptoms appearing, the immediate use of iodide of potassium is peremptorily indicated. When, however, secondary symptoms co-exist with the tertiary, mercury should be administered simultaneously with it, and thus often, when

* The dose given three times a day; not the quantity given daily.

neither of these medicines separately avail, the two may be combined with the happiest effect.

The patient should be kept on the use of iodide of potassium during from three to six months, according to circumstances, even though the venereal symptoms should have disappeared; the object being to guard, as far as possible, against a re-appearance of the disease."

The following are some of the pathological effects observed occasionally from its administration. And which require for their alleviation the suspension of the medicine for a while and such palliative treatment as the symptoms, from time to time, may indicate.

1. Tumefaction of the gums, an increased flow of saliva and a saline taste in the mouth, subsequently giving place to that of iodine; in short, a species of salivation not unlike that of puerperal women, and unaccompanied by the coppery taste, erythematous inflammation, and tendency to ulceration, belonging to salivation by mercury.

2. After large doses, pain in the cardiac portion of the stomach.

3. Serous diarrhœa, unattended by febrile action.

4. Excessive secretion of urine, and sometimes pain in the kidneys.

5. Symptoms of severe coryza, running at the nose, pain in the frontal sinuses, &c.

6. All the symptoms of bronchitis, with the exception of fever and muco-purulent expectoration.

7. Different forms of cutaneous disease, among which we shall notice but three:

(*a.*) A species of acne, more acute than the ordinary kind, and not confining itself, like the latter, to the face, chest, shoulders and upper part of the back, but found even on the thighs, where, indeed, it seems at times to develop itself by preference.

(*b.*) Eczema sometimes of a very grave type. M. Ricord relates a very interesting case, in which he was unable to continue the treatment by iodide of potassium long enough to subdue the venereal symptoms, before the appearance of severe eczema would render its immediate suspension necessary; the eczema always subsiding, and the venereal symptoms, which, up to that time, would decline, making fresh progress whenever the medicine was discontinued. The brain was at length attacked, and the unfortunate patient succumbed, after many vibrations between the two forms of disease.

(*c.*) Purpura.—M. Ricord supposes iodide of potassium to exert on the blood a defibrinizing influence, favorable to the hemorrhagic condition, of which influence he regards purpura as an indication.*

8. A condition of the eyes resembling catarrhal ophthalmia, the lids becoming œdematous, and the ocular conjunctiva elevated by serous effusion in the cellular tissue beneath it.

9. Augmentation of the secretive action of the mucous membranes, never terminating, however, in the formation of purulent or muco-purulent matter, unless a predisposition to inflammation exist in the part. A discharge of purulent matter thus occasioned is met with oftenest in the mucous passages of the genital organs.

10. Cerebral excitement, evinced by a species of intoxication, and sometimes cerebral congestion.

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* This property, however, accords so little with others which it is known to possess, that one may well be excused for remaining skeptical as to its existence, under any thing less than a rigorous demonstration.

SURGERY.

VASCULAR TUMOR OF THE NECK—REMOVAL.—*By the late* GEORGE MCCLELLAN, M. D.—The St. Louis Medical and Surgical Journal for April contains the particulars of the case by Dr. R. S. Holmes, of which the following is an abstract. A young lady, aged 19 years, consulted Dr. McClellan in relation to a tumor "situated in front of, but partially covered at its lower end by the sterno-cleido mastoid muscle, over the carotid, which it had pushed aside, and immediately above the thyroid gland; its upper portion was just beneath the skin, presented a hard feel, slightly elastic; the veins above it somewhat turgid, the skin tense, and the tumor but slightly moveable; it was of ten years' standing, and for six months previous to the operation had impeded respiration and deglutition to such a degree as to prevent rest in a horizontal position. It had been pronounced to be goitre. Dr. McClellan considered this opinion erroneous, but still was not clear in his own regarding its positive nature. The operation was based upon a negative diagnosis. On the 19th of Sept., 1836,

The patient seated in a chair, the operation was commenced by making a straight incision, some two or three inches in length, directly over the face of the tumor, dividing the skin; by means of a director and a scalpel, the fascia was then dissected that bound it down, and also the sterno-cleido mastoid where it crossed the tumor at its lower angle; after which a species of envelop or sac, that partially surrounded it, was opened, in doing which the tumor, being interlaced with it by meshes of vessels, bled profusely; the knife was thrown aside, and the handle of the scalpel and the fingers used to break up its adhesions; but by this time the blood had commenced to flow so freely, from innumerable vessels, that the greatest expedition was necessary. The operator thrust his two forefingers deep under the base of the tumor, and with one wrench spun it across the room.

This tumor was of a singularly anomalous character—the term vascular would be the most proper to apply to it: but it conveys but a faint idea of the congeries of blood vessels of which it was formed, on looking at it scarcely anything else than the ragged ends of the vessels that were torn in its removal, were perceptible; the small part of it that could not be said to be made up of blood-vessels, was of a hard gristly-like character: it was larger than, and of the shape of a hen's egg; homogeneous throughout; not varying in any part from this vascular and hardened texture.

The hemorrhage which followed the removal of the tumor was tremendous, and was only partially controlled by grasping the whole wound and parts about it in the hand, and then after a time gradually insinuating pieces of sponge wet with turpentine and dipped in the powdered root of the geranium until the wound was full, after which the edges were brought together by means of sutures. The sponge was allowed to remain, the blood still continuing to ooze from beneath and at the sides of it. On the eleventh day the wound looked well, and the hemorrhage had nearly ceased. On the twelfth day hemorrhage returned which was controlled in part by pressure. On the thirteenth day it became so great that there remained no other alternative but securing the bleeding vessels.

The patient being well raised in her bed, with the head falling slightly

back, so as fully to expose the neck, the wound was extended to the sternal end of the clavicle, for the purpose of taking up the subclavian, in order to check the flow in the inferior thyroid; but the artery was enlarged, and, as far as it could be felt, and seen by the hemorrhage, it was considered as improper—as, indeed, it was impossible—to tie it. An attempt was here made to displace the sponge, in order to reach the carotid, but everything was again in a pool of blood. 'Sponge it, sponge it,' cried McClellan; useless, vain: it could not be sponged fast enough. He plunged his fingers deep down, to stop the powerful bleeding, but out it poured like the jet from a pipe, spitting from under his thumb. Sponges clammy with astringents, were thrust in, to keep the enemy at bay; still it was blood, blood. Something must be done, ay, and quickly. The desperate ill had as desperate a cure. McClellan, with one bound, leaped into the bed, and with a knee on each side of the patient, tore out every vestige of the sponge in the wound, then, with a plunge of his forefinger and thumb into the pool of blood, he seized the carotid; the hemorrhage stopped for the first time since the operation, a view of the wound was obtained, the carotid was separated from its sheath, and tied below the point where the fingers of the operator still grasped it; the wound was brought together and poulticed.

The loss of blood was great; the patient fainted, and for a number of days was unable to raise her forearm on her body. From this time everything progressed favorably until the nineteenth day, when the patient was attacked with a chill and underwent the regular stages of an intermittent fever to which she had been subject. Several doses of quinine were administered, which arrested the disease on the "third or fourth chill." On the succeeding day the fever, a tertian, anticipated itself by several hours. The patient died in the cold stage. The autopsy revealed the thyroid gland considerably enlarged but not connected with the tumor, the ligature included only the artery.

Popliteal Aneurism Successfully Treated by Compression.—Prof. J. Knight and Dr. Tyler, of New-Haven, have in the Boston Med. & Surg. Jour. for May, 1848, reported a case of Aneurism in which compression by manual pressure was made use of. The following are the facts of the case, with remarks by Prof. J. Knight. In the month of October, 1847, Dr. K. was consulted by a wood-sawyer, about 48 years of age, for a tumor in the left ham.

For several months he had suffered from pain in the limb, especially below the knee, which the patient thought was rheumatism; and about two months before, had discovered a small tumor in the ham, which pulsated from the beginning, and which, as well as the pain, had been gradually increasing. I found the tumor of such a size as to occupy the whole of the popliteal space, and to press strongly upon the tendons of the flexor muscles, particularly those upon the outside of the limb. The leg, below the knee, was very painful and largely œdematous. All the symptoms of aneurism were so strongly marked as to leave no doubt concerning the nature of the affection. The action of the artery and the pulsation of the tumor were easily suppressed by very moderate pressure upon the femoral artery, either where it passes over the bone of the pubis or in the groin, or still lower down where it passes under the sartorius muscle. The patient was directed to lie in bed for a few days; and to relieve the severe pain he suffered, laudanum was administered in doses of 30 or 40 drops, and, when necessary, some of the common cathartics. By these means, employed for a week, the œdema of the leg was cured and the pain very much diminished: indeed, while in bed he was free from pain. The tumor, however, was unchanged in site or character.

We now concluded to attempt a cure by pressure on the femoral artery above the tumor, upon the plan recently practised by Hotton, Bellingham and others. For this purpose we employed successively all the means which have been described—the hoop tourniquet, the calliper-shaped instrument, the common tourniquet, guarding the limb against the pressure of the strap by encasing it in thick sole leather, and by a variety of other mechanical contrivances. There was no difficulty in controlling the artery, either by diminishing its action or suppressing it, by any of the instruments employed. By whatever instruments, however, the pressure was made, however carefully it was guarded, whether continued upon one point only, or shifted from one part of the artery to another, the pain in a short time became so severe that it could not be borne. There was no difference in this respect whether the limb was left uncovered or enveloped in a bandage from the toes upward. The pain was not in the part pressed upon by the instruments, but in the whole limb below, and was felt equally in the thigh, especially the outside of it, and the leg below the knee. The pain usually began in 25 or 30 minutes after the pressure was applied, and became intolerable in 15 or 20 minutes longer, so that it could not be continued in any instance longer than an hour. These efforts were continued at intervals for 8 or 10 days and, as nothing had been gained by them, were abandoned. Others have met with the same difficulty, and have been compelled to apply a ligature to the artery.

Before resorting to this, I concluded, with the concurrence of Dr. Tyler, to try manual pressure upon the artery. To accomplish this, a sufficient number of assistants was procured from the members of the medical class, who cheerfully offered their services. They were divided into relays—two keeping up the pressure for four or five hours, relieving each other every half hour, and these succeeded by two others, and so on. Sufficient pressure to suppress the pulsations of the tumor was found to be most easily made with the thumb or fingers, without a compress, upon the artery, as it passes over the os pubis: and the directions given to the assistants was to keep up this amount of pressure as nearly continuous as possible. This treatment was commenced at 3, P. M. No pain of consequence was produced by it for five or six hours, and then it was not severe, so that the patient was quieted by one-eighth of a grain of morphine once or twice repeated, and slept for the most part of the night. About eight hours after the pressure was applied, the temperature of the limb was diminished, and it appeared shrunken in size. At 11 o'clock the next morning, 20 hours from the commencement of the treatment, upon removing the pressure from the artery, the tumor had diminished very little, if at all, and pulsated about as strongly as ever, but the tibial arteries could not be felt. Probably the blood had ceased to enter them from the tumor during the night, in consequence of a coagulum forming in the artery where it left the aneurism. Upon examining the parts the next morning, about 40 hours from the commencement of the treatment, the tumor was found nearly one-third smaller in size, firm and unyielding on pressure, and entirely without pulsation. All treatment was discontinued. The femoral artery pulsated with its usual strength in the groin, and distinctly as far as its passage through the tendon of the adductor muscles. Between this point and the tumor, it could not be felt. Several of the anastomozing arteries, especially one upon the inside of the limb, could be felt pulsating strongly and enlarged in size.

From that time to this, a period of five months, no change has taken place in the limb, except that the tumor has gradually diminished in size so as now scarcely to be felt; and the leg, which was at first cold and weak, has nearly regained its natural temperature and strength.

The peculiarity of this case consists in the manner of making the pressure upon the artery, by the hands of assistants instead of mechanical contrivances; and in the slight pain the patient experienced from it. The advantages of this mode of making pressure are such, that I should at once resort

to it, if, upon trial, pressure by instrument were found to occasion much pain. It is interesting to look back upon the improvement which has been made in the treatment of aneurism during the past one hundred years. It is but seventy years since the only treatment ordinarily adopted for an external aneurism, consisted in cutting into it, emptying it of its blood, and applying a ligature to the two ends of the artery. The danger of this operation, from inflammation and from secondary hemorrhage, was such that a large portion of the patients died.

The first and greatest improvement, and that which has led to all the others, was the plan devised, not guessed at, but fairly reasoned out with great sagacity from well-known physiological and pathological laws, by Mr. Hunter, of placing a ligature upon the artery at a distance from the aneurismal tumor. The success of this mode of operating has been so great, that surgeons had almost ceased to look for any improvement on it.

Upon this plan, however, the treatment by pressure is a great improvement. It is so simple, so easily practised, even by those not familiar with surgical operations, and as far as it has been tried, so entirely free from danger, that it well deserves to be employed in all cases to which it is appropriate. The principal objection to this plan, is the pain which it sometimes produces. This is mentioned in the cases which have been stated, as often severe, and, in some, intolerable. This objection is removed, if it should be found, that in other cases, as in the one which I have stated, manual, in the place of instrumental pressure, is so easily borne. One case does not prove that it will be so, but it is sufficient to encourage others to make trial of it. In some cases of aneurism, which are so near to the trunk of the body that pressure cannot be made upon the artery between it and the heart, it may perhaps be made upon the distal side of the tumor with success. If it is so situated that efficient pressure can be made upon the artery beyond the tumor, and before any considerable branch is given off from it, coagulation of the blood will probably take place, and a cure be effected.

The treatment by pressure would seem, also, to be adapted to some cases of traumatic hemorrhage; those especially where a deeply-seated artery is divided at the bottom of a narrow wound, as in the palm of the hand or the sole of the foot. The trouble and anxiety which attend such cases, are familiar to every surgeon. In such cases, continuous pressure for a long time would probably not be necessary. It is a well-known fact that arteries, when wounded bleed in paroxysms at varying intervals, usually of several hours, and that obvious symptoms precede the hemorrhage. These are, increased heat, pain, and throbbing of the arteries of the part wounded. If, when these symptoms appear, pressure is made upon the arteries above, as upon the brachial artery, when the wounded artery is in the hand, the period of increased action of the vessels of the part and of hemorrhage may pass by, when the pressure can be removed, to be renewed again with the re-appearance of the symptoms, and continued thus at intervals until the wound in the artery is healed. I make this suggestion for those into whose hands a case of this kind may fall. The trouble to the surgeon, which attends this mode of treatment, is not to be taken into the account when the life of the patient is involved, or when he is to be saved from a severe surgical operation.

Failure to Ligate the Femoral Artery for False Aneurism —*Death in about sixty hours afterwards.*—Professor P. F. Eve, of Georgia, reports a case in the Southern Medical and Surgical Journal for May, 1848, of false aneurism situated "a little below the anterior superior spinous process of the left ilium," produced by a pointed piece of glass which remained in the upper part of the thigh for four days, at the end of which period the patient was so far exsanguinated, that in the attempt to enlarge the opening and remove the foreign substance and clot, for the purpose of ascertaining the point of hemor-

rhage, the patient became so exhausted that no pulsation could be felt in either of the inferior extremities. An attempt was made to ligate the femoral artery at the crural arch; the ligature was passed around what was supposed by all present to be the artery, (all pulsation being absent to guide). In a few hours the hemorrhage returned and the patient died. A post-mortem examination revealed an immense aneurismal sac extending from the thigh into the pelvis near the anterior superior spinous process. The *femoral artery was not tied*, being pushed one inch from its natural position. "The ligature embraced a portion of a tendon." The circumflex artery was the one wounded by the glass.

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Cancer of the Penis—*death a few hours after amputation from eating orange peel.*—Professor Eve, in 1837 amputated the penis of an Irishman for cancer; but little hemorrhage followed the operation. The usual dressings were resorted to and a dose of laudanum administered. A few hours after an orange was allowed the patient at his request, which he ate together with the entire rind; soon after he was seized with a severe attack of colic, and died. Dr. E. attributed the death of the patient to eating the orange-peel. Taylor, in his recent work on Poisons, mentions the case of a child aged seven years, that died from eating a quantity of orange-peel. Professor Wood, in the U. S. Dispensatory, has also known a child to die from the effects of eating the rind of an orange.

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Amputation through Large Joints.—Prof. F. H. Hamilton in the Buffalo Med. Jour. for June, is represented as having performed the operation of amputation of the hand through the radio-carpal articulation a few weeks since; and notwithstanding the fears which most surgeons entertain that amputation through this and other large joints will not do well, this healed kindly and has left a good stump, and what is best of all, the power of pronation and supination still exists to a limited extent, and Dr. H. thinks will increase. Several cases are now reported in American journals, the results of which render the propriety of such operations much less doubtful than formerly supposed, if not perfectly proper in all cases of injuries occurring in healthy constitutions, when the location is deemed desirable by the surgeon.

MIDWIFERY AND DISEASES OF FEMALES.

Occlusion of the Vagina.—Dr. Hayne, of Charleston, has reported, in the May No. of the Charleston Med. Jour. for 1848, a case of occlusion of the vagina, following sloughing of the os externum and vagina, five days after delivery with twins. Previous to delivery the patient suffered from intractable œdema of the labia majora.

Nine months after she was seen by Dr. H., who found her suffering from retention of the menses, caused by complete occlusion commencing one inch within the vulva. The size of the abdomen was that of a woman advanced

seven months in pregnancy, the fundus uteri as high up as the umbilicus. The plan of treatment pursued, was that of the use of the compressed sponge of a conical shape, allowed to remain twenty-four hours, and then removed, and the vagina cleansed by warm injections. This plan was pursued for four weeks, when, owing to the inflammation of the parts produced, it was discontinued for a week. The treatment was then resumed and continued for three weeks longer, when the seat of the stricture could be felt three and a quarter inches from the vulva. At the end of this time, a severe flooding set in, which was arrested by means of the tampon. The next day the tampon was removed, and a large flow of dark uncoagulated blood followed. Four weeks after she had completely recovered, and her natural menses appeared for the first time in eleven months.

A second case may be found reported in an "Introductory on Atresia Vaginæ," by Prof. Hard, of Ind. Med. Coll., a sketch of which is given in the second vol. of "The Annalist," p. 271. The occlusion, in this instance, resulted from instrumental delivery. An operation was performed by Prof. H., by which an opening was made "into the uterus at about the anatomical division between the cervix and body." About ten ounces of menstrual fluid flowed. Dangerous inflammation followed, requiring active depletion. At the end of four months, the patient had so far recovered, that she menstruated regularly through an artificial vagina large enough to admit the finger.

A third case of occlusion is reported in the Annalist for June 15th, 1848, in the Proceedings of the N. Y. Path. Soc. It occurred in the hospital practice of Dr. J. O. Stone, of this city. The patient eight months previous had phagadenic ulceration of the vulva and vagina, which resulted in complete occlusion one inch and a half from the vulva. The fundus uteri was felt a little to the left of the umbilicus. A large globular tumor was detected by an examination per rectum, completely filling the pelvis. The operation of puncture through the cicatrix by means of a trochar was resorted to. During the first twenty-four hours, thirty-five ounces of a dark tar-like substance was discharged. Symptons of metro-peritonitis set in on the second day, rapidly progressed, and the patient died on the fourth day after the operation. Autopsic examination revealed the presence of a cicatrix five lines in extent, the opening had been made directly through it into the sac. The sac was found to contain pus. Active inflammation of the cavity of the uterus and fallopian tubes, peritoneal covering of the pelvic viscera covered with effused fibrin of a caco-plastic character, that of the intestines and abdominal walls less intense.

This case is one of interest in the following point of view, viz. as showing most conclusively the direct transmission of inflammation from the mucous to the serous covering of the uterus. The order of pathological phenomena seemed to be, in this case, inflammation followed by suppuration of the sac, endo-metritis, inflammation of the fallopian tubes, inflammation transmitted by continuity over the pelvic and afterwards abdominal portion of the peritoneum.

Vaginal Hysterotomy.—Dr. W. K. Scott, in the Buffalo Med. Jour. for June, 1848, has published the notes of a case in which he performed this

operation. "About twenty-five years since, the patient was seen by Dr. S. in consultation with Dr. F. B. Hicks. She had been in labor for more than a week, during which time no traces of the os tincæ could be found. She was a healthy woman and had borne children. The pains were regular from the first; when exhausted she would sleep quietly for a short time."

The operation was performed by Dr. S. by means of a small scalpel, guarded by the finger; a gush of blood followed the incision. The placenta was adherent to the cervix uteri. Dr. Hicks proceeded to turn and deliver the child, which was accomplished in a short time. The patient recovered rapidly and has since borne children.

Two cases have previously been reported in American practice, for the first, see Vol. 2, p. 199, of this Journal. The second will be found in the American Jour. of Med. Sci., Vol. 15, p. 348. Both of these cases occurred in the practice of Prof. Bedford, of the New York University, in neither, however, was the placenta attached over the os or cervix uteri. The operation was successful to both mothers and children.

Ventral Pregnancy.—Dr. S. A. Peters, of Missouri, in the Med. Exam. for May, 1848, reports a case of extra-uterine pregnancy, where "the embryo and its membranes were found partly adherent to the upper and anterior part of the bladder." The chorion, amnion and placenta were distinctly seen—the embryo three inches in length. The uterus three times its natural size and its walls three-fourths of an inch thick. There was no decidua, gelatinous or other matter found in its cavity. Death was produced by the rupturing of the membranes of the ovum. "*Fifteen pints* of blood were removed from the abdomen."

MATERIA MEDICA AND PHARMACY.

Adulterated Medicines.—*Extract from Dr. Edwards' Report on Imported Adulterated Drugs, Medicines, &c., read before the House of Representatives, June 2d*, 1848.—Composed, as is your committee, of a majority of men who have made the study and practice of medicine the chief purpose of their lives, they feel no hesitation in admitting that the facts they are about to submit were but partially known to them, individually, until a very recent period. They have had before them specimens of the adulterations of which they speak, and ask a generous confidence in their statements.

In consequence of the stringent laws now in force in most parts of Europe, regulating the trade in drugs, and the dispensing of medicines, none but genuine articles, and those of acknowledged strength and purity, are allowed to be used or purchased. All inferior and deteriorated drugs in a crude state, as well as adulterated medicinal and chemical preparations, must, therefore, as a matter of necessity, find a market elsewhere; and that market, unfortunately for the people of this country, has long been and still is found in these United States.

For a long series of years this base traffic has been constantly increasing, until it has become frightfully enormous. It would be presumed, from the immense quantities, and the great variety of inferior drugs that pass our custom-house at New-York, in the course of a single year, that this country had become the grand mart and receptacle of all the refuse merchandise of that

description, not only from the European warehouses, but from the whole eastern world.

On reference had, not long since, to the custom-house books in New-York, it was found that 7,000 lbs. of rhubarb-root had passed within ninety days, not one pound of which was fit, or even safe, for medicinal purposes. Much of it had become greatly deteriorated by age, was worm eaten and decayed, while other portions, notwithstanding they showed a somewhat fair appearance externally, (the color, &c., having been brightened by artificial means for the purpose of deception.) gave internal, unmistakable evidence of the virtue of the root having been extracted by previous decoction, for the purpose of making what is sold as the "extract of rhubarb," and thereby rendering it of no further value for medicinal use. This article was invoiced at from 2½ pence sterling, (5 cents) to 7 pence (14 cents) per lb. The price of good rhubarb at the place of production, has been, for several years past, about as follows: The *East India*, from 35 to 45 cents per lb., according to circumstances; the *Turkey* or *Russian*, from $1 25 to $2 50 per lb, exhibiting a very wide difference in price, as will be perceived, between the good and refuse article.

Another of our more important articles of medicine, particularly in the newly-settled portions of our country, comes to us in large quantities entirely unfit for medicinal purposes; but like the worthless rhubarb root, is eagerly bought up at auction sales by unprincipled drug dealers, and sent to the drug mills, where it is ground and powdered, the color, smell and natural taste imitated, and afterwards sold to country dealers and others as a *good article*. The result of this is, that it is finally dispensed to the sick, at the sacrifice, doubtless, of many valuable lives every year; we mean the *Peruvian bark*.

Several varieties of this bark are used in medicine, viz.: the "yellow," the "pale," the "red," &c., but either variety can scarcely ever be obtained, at the place of production, of good quality and in good condition, at a less rate than from 30 to 40 cents per pound; and the quality generally used for the manufacture of *sulphate of quinine*, or the salts of *Peruvian bark*.) has not for years been obtained, from those parts of South America where it is produced, at a less price than from $60 to $80 per quintal of 100 pounds. The worthless article, particularly referred to above, comes principally from Europe, and seems to be made up of the different varieties already named, as well as to be in a greatly deteriorated condition from age, or from having had its medicinal virtues extracted, for the purpose of making the extract of Peruvian bark—a valuable medicine.

From appearances, it consists mainly of refuse material collected together, in foreign warehouses, for exportation. It is invoiced from 2 to 7 cents per pound. Thousands of pounds of this trash have passed through the New-York custom house, at the above price, during the past year, and may justly be considered very dear even at those rates.

Columbo and gentian roots, and many more of the important crude drugs, come to us in a similar worthless condition.

Opium.—An article of priceless worth in the treatment of disease, is now sent to this country in a greatly and dangerously adulterated state; and as a proof that the fraud carried on in the preparation of this valuable drug is now made not only a regular, but an extensive business, we are assured, on most reliable authority, that it is shipped directly from Smyrna, the most important place of its production, deprived not unfrequently of *two-thirds of its active principle*, that proportion of its medicinal property having been extracted for the manufacture of *morphine*. Opium is found to be adulterated with Spanish liquorice paste, combined with a small quantity of some bitter extract, and when but moderately deteriorated in this way, the fraud is not easily detected at first view; but it has been passed from Smyrna, *by the way of some of the European markets*, so freely adulterated, that the fraud was readily detected merely by the smell! no analysis being necessary. The so-called *opium* of this description is often found infested with living worms. Of course this de-

caying mass is not sold to the retailer or jobber in this condition, but is previously worked over and combined with a better quality of *opium*. Your committee embrace with pleasure this opportunity to present the name and services of Dr. M. J. Bailey, examiner of drugs, &c., at the New-York custom-house, as one to whom the country, and especially the medical profession, are deeply indebted, for the firm and faithful stand he has taken for exposing these frauds. His communications with us have been frequent and important. The activity and frankness of this gentleman deserves the highest commendation; we give an extract of a letter received from him, dated April 29th, in which he says:

"Motives of self or pecuniary interest, (had I listened to the prayers of those interested,) would have prompted me to withhold from the public the facts I have willingly disseminated, in order that permanent benefit might result therefrom. Many an argument have I held with those who professed to think it no moral wrong, while it was more profitable to themselves to impose such worthless and dangerous trash upon the community as we complain of."

For many years a considerable proportion of the foreign chemical preparations, medicinal extracts, &c., have come to us more or less adulterated; but the base fraud is no longer confined to that class of medicines. Opium is now adulterated to a most fearful extent, and so adroitly as almost to defy detection, by the unsuspecting and confiding purchaser. I have lately passed three invoices of opium from London, which, on opening the cases, seemed to all external appearances to be as it should, but a closer examination proved it a base compound of that drug with various vegetable extracts—the mass not affording more than about one-third part of pure opium. When I questioned the consignee, (and to the credit of our regular importers, most of these adulterated and deteriorated drugs and medicines are consignments from speculators abroad,) they admitted their private advices gave them to understand that the article "was not quite pure;" yet, as the law now is, I must pass all such dangerous and rascally imitations, if they are found *to be charged at their full value, and in commercial language, to be the article specified in the invoice.* In fact, I have no authority to examine into the purity, &c., of any article further than to enable me to judge as to the correctness of the value expressed in the invoice." We subjoin also a quotation from the Boston Traveller of last week, entitled "Frauds in Opium." "About twenty cases of opium were sold at auction yesterday, by John Tyler. It was imported from Smyrna and Liverpool in various vessels, and to all appearances was of equally good quality. Notwithstanding this, however, its price varied from $3 45, $1 35, *six cents, to three cents per pound.* An exposition of the fraud was made at the sale. It is said to consist in the extraction of the morphine, or vital principle of the drug, before exportation. This fraudulent opium was invoiced at a lower price than that of the first quality, but still greatly above its real value."

Genuine scammony, another important drug, is now but seldom imported. Not a single pound of pure Aleppo scammony has passed the New-York custom house during the last twelve months. The so-called scammony, now imported, contains only about one half the active principle of the genuine article; it being a combination of that drug and a worthless vegetable extract commingled with clay. Pure scammony is an expensive drug; hence the object of its adulteration.

Many of the medicinal gums and gum-resins imported are so deteriorated or combined with earthy or other matters, that they are not only unsafe, but worthless for medicinal purposes.

The medicinal extracts, which are very important medical agents when pure, were formerly made with great care, and of one uniform strength, but they now come to us not only prepared of the refuse or inferior drugs, but also greatly adulterated, &c. These worthless extracts, in external appearance, are well calculated to deceive—the parcels being as neatly put up,

labelled, &c., as those of the genuine. They are sold by the foreign manufacturer, on an average, at about one-half the price of the pure article.

In this business, as well as in the manufacture of chemical preparations used in medicine, there has been for years past a regular system of fraud carried on by many of the foreign manufacturers. They have not only expressed their willingness to prepare and send out to order, any article in their line, adulterated to any extent desired, with a corresponding price to suit, but they now, it seems, keep constantly on hand a supply of the adulterated, as well as of the pure preparations, and when remonstrated with by our honest importers, they excuse themselves by saying that "they must accommodate demands or lose sales, &c., as both qualities are ordered in large quantities from the United States—the genuine article, as they are given to understand, for the seaboard, and the adulterated for the western trade!"

Sulphate of quinine, or the salts of the *Peruvian bark*, a medicine now considered indispensable and of universal use, particularly where *intermittent fever* prevails, comes to us adulterated in various ways. The usual method is to combine it with *salicine*, (the salts of the *willow bark*,) *chalk*, *plaster of Paris*, &c. The salicine possesses similar medicinal qualities, and resembles quinine very much in appearance, but it is afforded at less than one-fourth the price, and is very far inferior in strength. This spurious article is largely imported, neatly put up in *French style*, with the label of the celebrated *Pelletier*, of Paris, (the original and always one of the most honorable foreign manufacturers,) on each article. This trash is made at an extensive establishment in Belgium, the whole business of which, your committee are informed, is to manufacture and dispose of base imitations of all the important foreign chemical and medicinal preparations. An agent of this establishment has been in this country for the last ten months. His business is to effect sales, and obtain orders. No wonder that those suffering the affliction of fever and ague in the western country take quinine by the tea-spoonful at a dose, rather than a few grains, which is all-sufficient when the article is pure.

Calomel is imported not only crudely prepared, but more or less adulterated with a white argillaceous earth or clay, and other articles; while it is put up after the manner, and bears the name of some well-known and deservedly-popular manufacturing chemist, the whole is a base imitation and fraud.

Large quantities of an imperfectly-manufactured *iodine* is imported in kegs, and put in the usual small bottles and parcels here. It is very impure, black and damp, and totally unfit for medicinal purposes.

Much of the *iodide* or *hydriodate of potass*, a valuable medicine when pure, is greatly adulterated by the admixture of the nitrate of potass, (saltpetre,) thereby changing its nature, and rendering it comparatively worthless.

Many chemical preparations are not unfrequently misnamed; imposing, by that means, upon the purchaser some inferior article, bearing a similitude to the genuine, but different in medical qualities and value; the label and the mode of package afford no security to the honest purchaser.

Thus might your committee continue through the whole catalogue, as most of the fine medicinal chemicals are prepared of unequal strength and purity, for the purpose of cheapening their cost, thereby rendering them less effective and more uncertain in the treatment of disease, and, in some cases, actually dangerous to the patient as well as obviously unjust and greatly embarrassing to the physician. *We* will here, however, proceed no further; believing the facts already set forth, respecting very many of our most important medicines, and those in daily use, will, if fully understood, satisfy your honorable body of the imperative necessity of the passage of a law calculated effectually to put a stop to this reckless and murderous trifling with human life for the sake of filthy lucre. Every feeling of humanity, as well as regard to justice towards those who are entrusted with the lives of the people, demand this at your hands.

[To be continued.]

MISCELLANEA.

Medical Services—*Legal responsibility of discontinuing the same.*—A suit was recently instituted in this city by a patient against his physician for abruptly discontinuing his attendance, after paying him a few visits, without notice being given of the same. It was alleged by the plaintiff, that his health was impaired by the defendant's so doing and the damages were laid at $5,000. The defence set up by the defendant was, that the plaintiff had during his attendance taken other medicines than those ordered by himself, and feeling himself insulted, and at the same time unwilling to assume the responsiblity of the case without his directions were implicitly followed, he considered it proper to discontinue his attendance—(all of which was perfectly proper and justifiable, but he should have notified his patient of the same.) Judge Ulshoeffer, in his charge to the jury, gave the following opinion. "A physician when once employed to attend a patient, cannot afterwards withdraw himself without giving due notice to the patient, so as the latter might provide himself with another physician; but by giving such notice, he is at liberty to withdraw from his attendance, and the patient cannot maintain an action. If a patient neglects to comply with the directions of his physician, and does not take his prescriptions, the physician may withdraw without subjecting himself to an action at law; and lastly, that if an injury arise to a patient from the combined neglect of himself and his physician, in such case the patient cannot maintain an action." The jury gave the plaintiff a verdict of six cents damages.

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New-York Hospital.—Dr. F. U. Johnston, for upwards of twenty years one of the attending physicians to this time-honored institution, has resigned. The urgency of his private professional engagements is the reason for his retirement from public duties. The charity has lost one of its most faithful servants and the clinical student an able and safe teacher. The vacancy thus caused has been filled by the appointment of Dr. H. D. Bulkley, one of our most thorough and accomplished physicians, who brings with him into his new field of labor a well-earned reputation. The appointment of Dr. B. has caused universal satisfaction.

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Influence of Statistics on Quackery.—Dr. Cartwright, in his recent statistical inquiries made on the influence of empiricism on the public mortality of Natchez for the last sixteen years, has clearly and fairly demonstrated, "that the prevalence of quackery has been more fatal, nearly two to one, than the prevalence of yellow fever, cholera, measles, whooping-cough, smallpox and all other diseases put together."

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University of Louisiana, *Medical Department.*—The Legislature of the state of Louisiana have, as will be seen in the May number of the New Orleans Medical and Surgical Journal, appropriated thirty-five thousand dollars to the University. We are pleased to learn that "a large portion of this sum

is to be expended in completing the medical department." The plan to be recognized in its completion is that of the University of Pennsylvania. We congratulate our brethren of the "Crescent City," in the attainment of this most desirable acquisition. It argues well for the future prospects of our honorable profession.

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REWARD OF THE EDITOR OF A MEDICAL JOURNAL.—In the June number of the Southern Medical and Surgical Journal, Prof. P. F. Eve, its editor, says, "From inquiries made at the National Medical Association, we venture the assertion that not one of the twenty Medical Journals of our country is adequately sustained, not one paying its editor $500 a year. The main income from his labor consists in the books sent him for review or notice, and in the reception of the exchange list."

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AMERICAN MEDICAL ASSOCIATION.—For the following abstract of the proceedings of the American Medical Association, held in Baltimore in May last, we are indebted to the Medical News and Library for June.

The association assembled in Baltimore, on Tuesday morning, May 2d, and the proceedings were opened by a short and appropriate address from the President, Dr. Chapman, of Philadelphia. The first day was occupied principally in receiving a report from the committee of arrangement, of the list of delegates to the association; the report of the treasurer, and the consideration of certain resolutions having reference to preliminary matters, &c.

Wednesday Morning, May 3d.

On motion of Dr. Hays, a committee of one from each State represented, was appointed to nominate officers for the ensuing year, who reported the following nominations, which were unanimously confirmed.

President.—A. H. Stevens, of N. Y.

Vice Presidents,—J. C. Warren, of Mass., Samuel Jackson, of Penn., Paul F. Eve, of Geo., and W. M. Awl, of Ohio.

Secretaries,—A. Stille, of Phila., and H. J. Bowditch, of Boston.

Treasurer,—Isaac Hays, of Philadelphia.

The president being conducted to the chair, returned thanks in a brief and impressive address.

On motion of Dr. West, the thanks of the association were presented to its late officers, for the able, faithful and gentlemanly manner in which they had performed their duties.

Copies of the code of ethics of the Philadelphia College of Pharmacy were presented, and the code was ordered to be inserted on the minutes.

Dr. J. R. Wood, presented a communication from the New-York College of Pharmacy, regarding the importation and vending of impure drugs, which was ordered to be placed on file.

Dr. T. O. Edwards, a member of Congress from Ohio, and chairman of a special committee of the House of Representatives, to which was referred the subject of the importation of worthless, adulterated and misnamed drugs, was introduced to the association, and invited to address it.

Dr. Edwards read a full and very interesting statement of the extent to which drugs are falsified, particularly with a view to their sale in the United States.

On motion of Dr. E. Hale, the thanks of the association were presented to the Hon. Dr. Edwards, for his important and interesting communication, and a committee of five members were appointed to prepare and report to the association a memorial to Congress on the subject.

The following resolutions, introduced by Dr. C. C. Cox, were also referred to the same committee.

Resolved, That a committee of five be appointed to report at the next meeting of the association—

1st. The nature and extent of the sophistication and adulteration of drugs, as practised by the wholesale dealers and retail druggists.

2d. The best means for the prevention of the evil in its various forms.

Committee, Drs. Parsons, Cox, Francis, Huston and Carr.

Dr. Hays, from the committee on publication, presented a report with the following resolutions, which were adopted.

Resolved, 1st. That the assessment for the present year be three dollars.

2d. That voluntary contributions be invited.

3d. That a copy of the printed proceedings be furnished to such members only of the association as shall have paid the assessment for the year.

4th. That those members of the association who shall pay five dollars instead of the assessment of three dollars, shall be entitled to three copies of the proceedings.

5th. That the committee on publication be authorized to make such arrangements for the sale of the transactions of the association as they may deem expedient, and to present copies to such public libraries, editors of medical journals, &c., as they may consider proper.

The report of the standing committee on obstetrics was presented, and read by the chairman, Dr. Harvey Lindsly, and referred to the committee on publication.

Invitations were presented to the association for the next meeting to be held in Boston, Washington, D. C., Columbus, Cincinnati, Buffalo, Nashville, Charleston and Newark, which were laid upon the table to be taken up in order.

The following resolutions were presented and laid on the table for future consideration.

By Dr. Stille—*Resolved*, That the delegations from the several States be earnestly requested to urge upon the deputations in Congress of their respective States, the necessity of a law against the importation and sale of adulterated, deteriorated and misnamed drugs, and recommending the enactment of the law presented by Dr. Edwards, the Chairman of the special committee of the House of Representatives, having charge of the subject.

By Dr. T. F. Cock—*Resolved*, That the delegation of each State be requested at once to memorialize the representatives of their State in Congress, with a view of forwarding the passage of a law regulating the sale of drugs.

By Dr. Cox—*Resolved*, That a committee of three be appointed by the association to collate and digest the required information upon the subject of the abuse and adulteration of drugs, practised by wholesale dealers and retail druggists throughout the country, and to report such measures for the suppression and prevention of this growing evil, as will, in their opinion, conduce to this end.

Dr. Norris, chairman, presented and read a report from the standing committee on Surgery, and Dr. I. Parrish a report from the same committee, relative to the use of anæsthetic agents, both of which were referred to the committee on publication.

Dr. Stewart laid upon the table the following resolution:—

Resolved, That a committee of one from each State be appointed to report to this association at its session to-morrow morning, the names of gentlemen to compose the various standing committees for the present year, and that said committee be instructed to present the names of such members only as are in actual attendance. Adjourned.

Wednesday Afternoon.

The association was called to order by the President.

On motion, the rules were suspended, to permit the consideration of the resolution offered by Dr. Stewart at the close of the morning session, which was then adopted, and the committee ordered to consist of the same members as that appointed for the nomination of officers.

On motion of Dr. W. Parker, the same committee were instructed to report a place for the next meeting of the association.

Dr. O. W. Holmes, chairman, presented and read the report of the committee on Medical Literature, which was referred to the committee on publication.

On motion of Dr. A. L. Pierson, the association proceeded to consider so much of the reports on obstetrics and surgery, as relates to the use of anæsthetic agents, and Dr. J. C. Warren made some interesting observations on the subject.

Dr. Hamilton presented the following resolution:—

Resolved, That considering the present limited amount of authenticated facts, in relation to the danger or safety, of anæsthetic agents in medicine, surgery and obstetrics, this association is not now prepared to determine upon their value, or the propriety of their use, and that the subject be referred to a special committee, who shall report at the next annual meeting.

Owing to the lateness of the hour, action on this resolution was postponed, and it was, at a subsequent session, referred to the appropriate standing committees. Adjourned.

Thursday Morning, May 4th.

The president called the meeting to order. The minutes of yesterday's meetings were read and accepted.

After some preliminary matters were gone through with, Dr. Cohen, of Baltimore, presented the following resolutions, which were adopted.

Resolved, That the American Medical Association regards with pride and satisfaction, the services rendered and the position maintained by that portion of the profession associated with the military department of the country; and in consideration of the severe and arduous duties which the medical officers have performed, the risks and dangers to which they have been exposed in the performance of those duties during a period of warfare, and in an unhealthy climate, it is deemed just and proper by this association that their services should receive from the government an acknowledgment, corresponding to that awarded to their brother officers.

Resolved, That the members of this body hereby express their gratification with the position recently assigned the medical officers of the navy, and their influence will be used to sustain their naval brethren in a position alike due to them and the profession of which they are members.

Resolved, That a copy of these resolutions be forwarded to the Secretaries of War and of the Navy, through the chiefs of the medical departments of each service, and to the chairman of the military and naval committees in each House of Congress.

Dr. Wynne presented a communication from the medical department of the National Institute on the subject of hygiene, and offered a resolution that the communication be referred to a select committee of five, which was adopted, and the following committee were appointed:—Drs. J. Wynne, J. M. Thomas, O. W. Holmes, Isaac Parrish, and G. L. Corbin.

Dr. Roberts presented a memorial from the naval medical corps of the United States, and offered a resolution that it be referred to the committee on publication, which was adopted.

The committee appointed to nominate the standing committees, reported the following nominations, which were adopted.

Committee of Arrangements.—Drs. Jacob Bigelow, E. Hale, Z. B. Adams, — Dalton, John Ware, O. W. Holmes, N. J. Bowditch, of Boston.

Committee on Med. Sciences.—Drs. L. P. Yandell, Ky.; Smith, Ohio; White do.; E. S. Carr, Vt.; S. Jackson, Penn.; Upshur, Va.; Harris, Tenn.

Committee on Pract. Medicine.—Drs. Condie, Penn.; Gerhard, do.; Clymer, do.; John Ware, Boston; G. Tyler, D. C.; Fithian, N. J.; Kreider, O.

Committee on Surgery.—Drs. N. R. Smith, Md.; Askew, Del.; Baxley, Md.; Knight, Conn.; Pancoast, Penn.; McGuire, Va.; Shipman, Ind.

Committee on Obstetrics.—Drs. Wellford, Va.; Peebles, do.; N. Young, D. C.; Z. B. Adams, Mass.; C. R. Gilman, N. Y.; J. A. Eve, Ga.; Rouse, Ill.

Committee on Med. Literature.—Drs. J. P. Harrison, Ohio; Breese, do.; Edwards, Ill.; Latta, Ind.; Holmes, Mass.; Stewart, Md.; Thomas, D. C.

Committee on Med. Education.—Drs. F. C. Stewart, N. Y.; John Watson, do.; J. M. Smith, do.; A. L. Pierson, Mass.; Pennington, N. J.; Gaillard, S. C.; Meeker, Ind.

Committee on Publications.—Drs. I. Hays, Penn.; Stillé, do.; Condie, do.; Bowditch, Mass.; Dunbar, Md.; Barker, Conn.; Jump, Del.

The committee also recommended the city of Boston for the next meeting of the association. The report was accepted, and nominations confirmed.

Dr. Wellford presented and read a report from the standing committee on Medical Education, accompanied with a series of resolutions, which were amended and adopted as follows:—

1. *Resolved*, That this association considers defective and erroneous every system of medical instruction, which does not rest on the basis of practical demonstration and clinical teaching, and that it is therefore the duty of the medical schools to resort to every honorable means to obtain access for their students to the wards of a well-regulated hospital.

2. *Resolved*, Therefore, that this association earnestly and respectfully appeal to the trustees of hospitals to open their wards for the purposes of clinical instruction, satisfied that they will thereby more efficiently aid the cause of humanity, and more perfectly accomplish the benevolent intentions of the founders of the charity.

3. *Resolved*, That the practice of appointing physicians and surgeons to the charge of an hospital on political or other grounds than those of professional and and moral worth, is inconsistent with the welfare of its inmates, and of consequence, inhumane and unjust, subversive of the objects of its founders, and incompatible with a conscientious appreciation of the high responsibilities devolved on the appointing power.

4. *Resolved*, That this committee reiterate, and strongly recommened to the association, a practical observance of the resolutions appended to the report of the committees on preliminary education, and on the requisites for graduation, submitted to the medical convention, which assembled in Philadelphia, in May, 1847.

5. *Resolved*, That the faculties of the different schools be requested and advised to institute daily or weekly examinations, recapitulatory of the previous lecture or lectures, and take such measures as may enable them to ascertain the regular attendance of the students upon the lectures up to the close of the term.

6. *Resolved*, That this association recommend to the faculty of each medical school to conduct the final examination of candidates for diploma, in presence of some official person, or persons, properly qualified to recognize the attainments of the candidate, but who has no pecuniary interest in the institution or in the number of its pupils.

7. *Resolved*, That it be also recommended, that, in view of the inaugural Thesis, or in addition thereto, each candidate for the diploma be required to present to the faculty, at or before the time of final examination, a report drawn up by himself and from his personal observation, of not fewer than *five* cases of disease, and upon which he shall be duly examined.

8. *Resolved* That the faculty of each medical school be requested annually, and as early as possible, to furnish the chairman of the committee on

education with a statement of the number of pupils and of graduates in their respective schools, together with such other information as may expedite the labors of the committee, and enable it to discharge the duties assigned by the constitution under which it acts.

Dr. J. M. Smith, chairman of the standing committee on Practical Medicine, gave a short sketch of his report, and on motion he was requested to transmit a copy of the report to the committee on publication.

Dr. Hays asked permission to inquire whether it was the sense of the Association in referring the minutes, reports of the standing committees, with the accompanying documents and other papers to the committee on publications, that these should be published entire, or that the committee should have discretionary powers?—when, on motion, it was resolved that discretionary powers be vested in the committee.

Thursday Afternoon, May 4th.

Dr. Usher Parsons, from the select committee on the adulteration of drugs, presented the draft of memorial to Congress, which was ordered to be signed by the officers of the Association, and sent to Dr. Edwards, chairman of the committee appointed by Congress on this subject.

On motion of Dr. J. L. Atlee, a resolution was adopted, earnestly recommending to the physicians of those States in which State Medical Societies do not exist, to take measures to organize State Societies before the next meeting of the American Medical Association.

The committee to whom was referred the communication of the Medical Department of the National Institute, on the subject of hygiene, reported, recommending the appointment of a committee on hygiene, to consist of twelve members, to be appointed by the president, with power to fill vacancies. The following constitute this committee:—Drs. Jas. Wynne, Balt.; Charles P. Gage, Concord, N. H.; J. M. Thomas, Washington, D. C.; Isaac Parrish, Philad.; P. C. Gaillard, Charleston; L. P. Yandell, Louisville; J. P. Harrison, Cincinnati; A. Smith, Peterboro', N. H.; J. Curtis, Louisville; E. H. Barton, N. O.; J. H. Griscom, N. Y.; Turner, N. O.

The report of the committee on indigenous botany, was presented and referred to the committee on publication, and the documents which accompanied it, were referred back to the committee, with a request that it would continue its researches.

Friday Morning, May 5th.

The association met at 9½ o'clock. On motion of Dr. J. C. Warren, the following resolution was adopted.

Resolved, That in order to prevent the loss of time to the Association, the committee of arrangement be requested to sit on the day before the annual meeting, and that all members who arrive on that day be desired to present their credentials without delay.

On motion of Dr. G. L. Corbin, a committee of twelve was ordered to represent the association at the meeting of the British Association, and of the Prov. Med. and Surg. Association, and the following were appointed: Dr. Geo. B. Wood, of Philadelphia, Jacob Bigelow, of Boston, and H. H. McGuire of Winchester, Va.

On motion of Dr. Bowditch, the committee on hygiene were requested to investigate the effects of confinement in prisons and penitentiaries, and of the discipline in general, in these institutions, on the health of the inmates, and report to the meeting of the association.

On motion of Prof. Jackson, the committee on hygiene were requested to direct their attention to the following subjects:

1. What is the influence likely to be produced by the extensive introduction of tea and coffee into the diet of persons under the age of puberty?

2. What is the influence of the substitution of the luxuries of tea and coffee as food upon the health of the laborious classes?

Dr. Gordon Buck presented, with a drawing, a memoir, entitled "a new feature in the anatomical structure of the genito-urinary organs," which was referred to the committee on publication.

On motion of Dr. Zulick, the members of the association were requested to transmit to the chairman of the appropriate standing committees, the histories of any important cases, which they may meet with in practice.

On motion of Dr. R. H. Thomas, the delegates from medical societies, universities, colleges, &c., were requested to suggest to their several constituencies, the propriety of making an annual contribution towards the funds of this association, in proportion to the number of copies of the proceedings desired by them.

On motion of Dr. Upshur, the committee on publication were desired to append to the proceedings of the association each year a catalogue of its officers and permanent members.

Dr. Stillé presented a circular from the Philadelphia College of Pharmacy, with a resolution and memorial to Congress annexed, relative to the introduction and sale of spurious and sophisticated drugs, which were referred to the committee on publication.

Various proposals for amending the constitution were offered, and, as required, laid on the table for consideration next year.

On motion of Dr. Stillé, it was unanimously resolved that the thanks of the association are hereby tendered to its committee of arrangements, and to the committee of reception of the delegates from Baltimore, for their constant and efficient exertions to provide for the comfort and enjoyment of this body, to the Medical Faculty of the University of Maryland, to the Faculty of Washington Medical College, and to the members of the medical profession in this city, for their warm and courteous welcome and hospitable entertainment, which have strengthened the bonds of personal friendship and professional brotherhood between them and the delegates from other parts of the United States.

On motion of Dr. Baxley, the thanks of the association were presented to the Hon. J. G. Davis, Mayor of the city of Baltimore, for facilities placed at the disposal of the committee of arrangements for promoting the comfort and convenience of the association.

On motion of Dr. Biddle, the thanks of the association were unanimously tendered to the president for the ability, courtesy, and impartiality with which he had discharged the duties of his chair.

A vote of thanks to the remaining officers was also passed, and the association then adjourned *sine die*.

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

Epidemic Fever of Ireland.—Dr. Lalor has in an article in the Dublin Journal of Medical Science, for February, 1848, published his views on the connection existing between the famine of that unhappy country and the epidemic *Gastro-purpuric*, or as it has been called *famine fever*. The following are the conclusions he gives at the close of his elaborate paper.

1. Gastric fever prevailed before the failure of the potato crop in 1845.
2. The purpuric eruption became prevalent about the time of this failure, but previously to the occurrence of famine.
3. This eruption did not appear with a new fever of its own, but as an addition to the previously reigning fever; and it was a frequent accompaniment of smallpox as well as of gastric fever.
4. Purple spots have not appeared in measles, and scarcely more frequently than usual (if at all so) in maculated typhus.
5. Other diseases have not been complicated with this eruption, even in delicate and ill-fed subjects.
6. With the setting in of the general and aggravated famine in last autumn, gastro-purpuric fever became considerably more prevalent and fatal, the eruption assumed a worse character and greater frequency, dangerous symptoms and complications previously observed grew more common, and new ones set in, amongst which was putrid diarrhœa.
7. *Post-mortem* examinations have shown that putrid diarrhœa arose from profuse purpura of the intestines running into a peculiar form of gangrenous ulceration, and that less malignant forms of diarrhœa were often concurrent with a more sthenic and scantier purpuric eruption of the intestines not running into gangrene.
8. Gastro-purpuric fever was at its height, both as to malignancy and frequency, during the prevalence of cold and moist weather; and an increase of mortality and fever was invariably observed on the change of weather from dry and warm to moist and cold, and *vice versâ*. In connection with this point the severity of last winter must not be forgotten.
9. Gastro-purpuric fever and diarrhœa were most frequent, and of the worst forms, amongst the ill-fed, ill-housed, ill-clothed,—amongst the most uncleanly, and those of weakest constitution, as females and persons near the two extremes of age, and amongst those exposed to an over-crowded and vitiated atmosphere. Bad forms of gastro-purpuric fever and of diarrhœa were rare in the opposite classes.
10. Nevertheless, gastro-purpuric fever, and less severe forms of diarrhœa than the putrid, have attacked many who were apparently placed in conditions the most opposed to their development; but such persons had been previously much exposed to the contagion of gastro-purpuric fever.

11. The eruption, diarrhœa, or other symptoms, have never assumed their malignant form in such cases, unless when the patients were exposed to a foul atmosphere, as in the over-crowded wards of an hospital; but such exposure has occasionally developed the worst symptoms, even in the most robust individuals. From the observation of certain cases, I think there is at least a strong presumption, that foul air alone is capable of developing gastro-purpuric fever.

12. Cases of death have occurred from, and I have myself seen many suffering, apparently, owing to the unmixed effects of famine; and in those cases the phenomena of gastro-purpuric fever did not present themselves.

13. However gastro-purpuric fever may have originated, the facts that have come under my notice have convinced me that it has been communicated and extended by contagion. To detail all these facts would extend my observations to an unnecessary length.

14. Gastro-purpuric fever appeared as an epidemic for the first time shortly after the establishment of meal stores in districts previously pretty healthy.

15. Notwithstanding the exposure of many of the wealthier classes, as poor-law guardians, members of relief committees, &c., to the contagion of gastro-purpuric fever, it has not in general been developed amongst them; but such of them as have been attacked with fever have usually exhibited the fourteen-day maculated typhus.

16. Persons placed in somewhat the same condition as the wealthier classes, except as to the habitual use of meat diet, have usually, when attacked, exhibited the gastro-purpuric, and not the typhoid form of fever. This class includes artisans and tradesmen in good employment.

17. From the two preceding observations it would appear, that the habitual use of animal diet has been more or less preventive of gastro-purpuric, but not of typhus fever.

Bright's Disease on the Kidney.—In April last, (see Monthly Journal Med. Sci. for May,) Dr. Gairdner read a paper on the nature of this affection before the Med. & Chi. Soc., of Edinburgh. In a discussion on the subject of the paper, Drs. Bennett, Paterson, Gairdner and Prof. Simpson took part.

The object of the paper was to show, that the symptoms usually considered as indicating Bright's disease, are not found in connexion with one pathological lesion exclusively, but may be the result of several disorganizing processes. The author described the pathological lesions of the kidney as being essentially the same as those of other organs, the differences being the result of the anatomical disposition of the gland. The deposition of fatty granules might occur in connexion either with acute or chronic forms of disease. Instances of its acute deposition are to be found in pneumonia, and other parenchymatous inflammations, where the so-called exudation corpuscles have exactly the same mode of origin from the ephithelium of the lung, as the fatty cells in the parenchyma of the kidney. Neither could the granular or fatty exudation be considered as the proximate cause of albuminuria or dropsy; as it might occur to a considerable extent without either of these consequences. Albuminuria was generally connected with imperfect formation of the secreting cells, and very frequently with desquamation, as described by Dr. Johnson, Mr. Simon, and others. Dr. Gairdner pointed out the analogy of this morbid process with the ordinary phenomena of mucous inflammations, as described by Henle. This he was disposed to consider as the initiatory process of Bright's disease; it might be succeeded by exudation, or by other pathological lesions, according to circumstances. The granulated kidney, the non-granulated (fatty) kidney, and a peculiar waxy degeneration, corresponding with the "marbled" kidney of Rayer, were described by the author as frequent in connexion with Bright's disease. The result of most of these forms of disease was atrophy and contrac-

tion, which occurred by the absorption of the exudation, and collapse and obliteration of the tubes.

Dr. Hughes Bennett stated, that he had on several occasions examined the demonstrations of Dr. Gairdner, and could vouch for the accuracy of the facts he had described. Some of those, more especially such as were explanatory of the changes occurring in the tubes after the evacuation of their fatty contents, were new, and constituted a valuable contribution to our knowledge of the morbid anatomy and pathology of renal disease. The observations of Dr. Gairdner, as well as those of several German pathologists, and of Dr. Johnson of London, as regards fatty degeneration of the organ, were illustrative of a series of changes which occurred in numerous glands, and exhibited the great importance of paying attention to accumulation of the fatty element as a cause of disease. There could be but little doubt that exudation into the tubes was one of the primary changes in the kidney, whereby, as the author had explained, secondary effects were produced on the Malpighian bodies and the capillaries. It was in recent cases, more especially such as occurred during or subsequent to scarlatina, that fibrinous moulds of the tubes were most frequently found in the urine, which could only be regarded as the natural excretion of the morbid product. They were analogous to the fibrinous moulds of the bronchi, expectorated in pneumonia. Dr. Bennett considered that the good effects of diuretics in certain cases of kidney disease, might be explained by the increased secretion of fluid favoring the expulsion of these moulds. In other cases, again (which further observations could only more particularly indicate,) diaphoretics were of great service, owing apparently to the well-known sympathetic connexion existing between the skin and all mucous membranes, but especially those of the kindey.

Professor Simpson stated, that he was much interested in this subject from the frequency of albuminuria in pregnant cases. Disease of the kidney led to the absorption of urea, and a train of nervous symptoms of the utmost importance. He related several interesting cases of these, and especially one in which the urine remained albuminous for four months, and, after every thing had failed, was cured by diaphoretics. The discovery of the fatty nature of the disease was very important, and its frequent occurrence in cases of pregnancy might be explained by the circumstance, that milk was often secreted and circulated in the blood long before parturition.

Dr. Paterson asked, whether the albumen found in the urine was secreted in the tubes, or was poured out from the blood, and how the hæmaturia, which was so common a symptom in Bright's disease, was occasioned?

Dr. Gairdner said, in reference to the remark of Dr. Bennett, that he had thought it right to be very cautious in drawing therapeutical inferences from a pathology which was still in its infancy. It had been attempted by some writers on this subject, to deter the profession from the use of diuretics in the desquamative forms of the lesion; whereas these remedies were undoubtedly found useful in some cases, in which he believed their action was precisely similar to that of expectorants in catarrh and bronchitis. He had seen comparatively few cases of the temporary albuminuria described by Dr. Simpson, owing to his observations having been made in hospital practice. He considered the albuminuria undoubtedly a morbid secretion, and thought that the hæmaturia was generally seen where there was little of the fatty exudation.

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Open Foramen Ovale, and its Connexion with Cyanosis. — By Dr. MAYNE of Dublin.—The author founds his observations on a very rare and remarkable case, of which he gives a detailed account. The foramen ovale in this case was so large as to allow a half-crown piece to pass with ease, and there was no Eustachian valve. The left auriculo-ventricular orifice was contracted so as barely to admit the points of two fingers, and the mitral

valve was shortened so as to permit of regurgitation. These lesions were accompanied by immense hypertrophy of the right ventricle, with enlargement of the right orifices, and dilatation of the pulmonary artery and veins; while the left ventricle was very much diminished in thickness and size, and all the great vessels of the systemic circulation were diminished in calibre; the abdominal aorta admitting the little finger with difficulty, and its arch and the venæ cavæ being contracted in proportion. The valves of the aorta and pulmonary artery were healthy. The right auricle (which received the contracted venæ cavæ) was considerably dilated; the left auricle (into which the dilated pulmonary veins entered) was of natural size. There was apoplectic engorgement of the lungs.

The symptoms of these remarkable lesions were dyspnœa and palpitations on exertion, cough, and perpetual sweating. There was great indisposition to exertion, and the patient (a female) declared that death would be the consequence of any attempt at exercise. The quantity of food consumed by her was so small as to excite general surprise; she did not, however, become very emaciated even at the close of her life. The chest was examined frequently during two years, and always with the same results. There was extended dulness in the cardiac region, and a bruit heard over a limited space in the neighborhood of the fourth costal cartilage on the left side; this bruit was inaudible both at the apex and in the line of the aorta. The rhythm of the heart was natural. The respiratory sounds were every where excessively feeble, and this character was constant. At no time during the progress of the case, had the patient been affected either with dropsical symptoms or with cyanosis. She died suddenly at the age of twenty-nine, a few hours after a trifling exertion.

Dr. Mayne remarks that, in this case, the obstruction at the left auriculo-ventricular orifice must have caused the current of blood to pass by the open foramen ovale from the left into the right auricle, instead of from the right to the left, as is usually the case. The absence of cyanosis is thus readily accounted for; instead of the pulmonary blood being partially circulated in the systemic vessels, the converse was the case, and the system was robbed of already aerated blood, a portion of which passed through the lungs a second time. The large size of the pulmonary vessels, and the diminished calibre of the systemic trunks, is evidently explained by this state of the circulation; and the feebleness of the respiratory murmur, may perhaps be owing to the circumstance, that a certain portion of the blood passing through the lungs had already undergone aeration, and therefore, a small supply of air was requisite for the completion of the process.

The occurrence of contraction of the left orifice of the heart, in connexion with congenital patency of the foramen ovale, is rare in comparison with contraction on the right side. The latter condition is the most frequent cause of cyanosis.—*Dublin Quarterly Journal*, Feb. 1848.

Rupture of the Chordæ Tendineæ of the Tricuspid Valve.—By Dr. R. B. Todd.—This unusual lesion occurred in a man aged twenty-one, who died in King's College Hospital, London. Three years before admission he had been stabbed in the right side in a riot, and suffered great alarm; after this he had a pleuritic attack, for which he was largely bled. From this time till admission, he had frequently passed large quantities of blood by stool and by vomiting. General anasarca had existed for a month before admission.

The liver and heart presented signs of enlargement on admission; there was crepitation, with feeble respiratory murmur in the back; the breathing was rapid; the pulse small and compressible. There was a loud systolic murmur at the apex of the heart, and over the sternum; also another less loud (probably anemic) at the base, which was prolonged into the aorta. The second sound was feeble. The patient died, five days after admission, of increased dropsy and dyspnœa.

The lesions in the heart were confined to the right side, which presented considerable hypertrophy, with dilatation. The anterior division of the tricuspid valve lay loose in the cavity of the ventricle; the chordæ tendinæ were torn across; and the musculi papillares, from which they sprang, were shrunk and atrophied. The ends of the ruptured tendons were swollen into little knobs, like the swollen ends of the nerves of stumps after amputation. There was no thickening of the lip of the valve. The aorta and its branches were small.

The state of the musculi papillares and tendinous cords shows the lesion to have been of considerable duration. It appears not impossible that it may have originated at the time of the riot. The united influences of fear and of a struggle might cause a temporary check to the respiration, sufficient to account for impeded circulation in the lungs; and hence the blood in the right side of the heart would be driven back upon the auriculo-ventricular orifice and its valve, causing a violent strain upon the latter. The hæmatemesis and the enlargement of the liver probably arose from the same condition; viz. engorgement of the systemic venous circulation consequent upon the regurgitation. The state of the veins of the neck could not be determined, owing to the anasarca. The stethoscopic examination was also necessarily very incomplete.—*Ibid.*

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Cerebral Congestion; its relations with Hemorrhage and Softening of the Brain.—By M. Durand Fardel.—The following conclusions are arrived at by M. Durand Fardel, in a memoir upon this subject read to the Academy of Medicine in Paris. Cerebral congestion terminates almost always in one of three ways. It is dissipated spontaneously, or as the result of a proper treatment, or it leads to cerebral hemorrhage, or ramolissement. The state of the walls of the cerebral vessels, the existence of a partial alteration of the nervous pulp, consisting in a sort of rarefaction of tissue, the presence of anterior lesions of the cerebral substance, such as cysts, cicatrices, &c., can, without doubt, exercise some influence relative to such or such a result of cerebral congestion. It may be established in a general manner, that advanced age, in concentrating all the physiological activity of the economy towards the brain, or towards the chest, constitutes one of the most powerful predispositions to sanguineous fluxions, to hemorrhages, and to inflammations (ramolissement) of the brain, as it may be seen on the other hand equally to predispose to hyperemias and phlegmasias of the pulmonary organs. If it be true that cerebral congestion plays a principal part in the preparation and production of two of the most common and serious affections of the brain, it follows that the most positive indications exist with regard to the time at which art may interfere, and the hygienic and therapeutic means which ought to be employed in these dreaded affections.—*Month. Jour. Med., from Gazette Médicale*, May 3, 1848.

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Jaundice of New-born Infants. By M. Hervieux.—M. Hervieux, in a recent thesis, has endeavored to supply a more correct account of this disease than that hitherto given, derived from his observation of forty-five cases. He rejects the various divisions of the disease made by authors, as so many hypothetical suppositions, derived from observation of what occurs in the adult; and recognizes but one form always appearing during the first month, and attended by the same symptoms and morbid changes. He combats the opinion of M. Leger, that the *induration of the cellular tissue* is always accompanied by jaundice; for in ninety cases of this disease, jaundice only manifested itself thirty-one times, and in forty-five cases of jaundice the induration has also been met with but thirty-one times, showing a coincidence, but not cause and effect. He also denies that *enteritis* is a cause, although a common complication of this as of other diseases of this age. Nor does he admit the engorged or inflamed state of the *liver* as any other than an epiphenomenon,

nowise connected with the yellow color of the skin. Still it is from the disorder in the functions of this organ in its transition from an organ of hæmato-iä to one of biliary secretion, that the icterus arises.

His anatomical observations on the disease lead him to conclude—1. That all the organic tissues are in different degrees liable to the icteric effusion. 2. The intensity of color which these tissues acquire is in direct proportion to the amount of their vascularity. He enumerates the various structures; but we will not follow him here, merely observing that the bones, ligaments, and cartilages were, in a certain number of cases, undoubtedly colored, the sclerotica, however, being found so only once. Not only were the serous and mucous membranes colored but the fluids they secreted likewise. The biliary apparatus was found to have undergone just the same changes as it does in scleroma or enteritis—the so-frequent complications of icterus—but neither the biliary ducts nor umbilical veins presented the marks of inflammation described by some. The yellow patches in the parenchyma of the kidney, described by Billard, were of two sorts, the one arising from icteric effusions, the other of a far brighter color, unconnected with it. The respiratory apparatus furnishes evident marks of color; but the *nervous system*, and the *brain* in particular, were intensely colored in thirty-one cases. The hue of the skin is often modified into a coppery or orange color, by its co-existing vascularity. The conjunctiva, contrary to what has been stated, is *always* colored, as is also the gingival mucous membrane, and that lining the lower surface of the tongue. The author has never detected the coloring matter in the *urine*, as seen in adults, or a decolored state of the fæces. The disease commences with the conjunctiva the second or third day after birth, and goes through all its stages in six or seven, or at most fifteen days; exists very rarely beyond the twentieth, and never beyond the thirtieth, day. Its complications (from which alone arise any danger in this affection) are purely accidental, being mere coincidences. In these forty-five cases such complications consisted of scleroma thirty-one times, enteritis fifteen times, muguet five times, pneumonia twice, purulent ophthalmia ten times. M. Hervieux, regarding simple icterus as rather the sign of a new function temporarily exceeding its physiological limits, than as a disease, recommends that the case should be left entirely to the resources of nature.—*L'Union Médicale*, 1847, No. 154, *and British and For. Med. Chir. Review*, April, 1848.

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On Certain Forms of Alkaline Urine. By Dr. G. Owen Rees.—In a case of extrophy of the urinary bladder, Dr. Rees had an opportunity of observing the condition of the urinary secretion before and after contact with the mucous membrane of the bladder. He found that, when tested as it flowed from the extremities of the ureters, it had a normally acid re-action; but that as it trickled, drop by drop, over the mucous membrane of the bladder, it became rapidly alkaline, from the admixture of a copious alkaline mucus which was secreted from the exposed membrane. Dr. Rees conceives the alkaline secretion to be thrown out for the protection of the irritable membrane of the bladder, and thinks that a certain number of cases of alkaline urine are due to the stimulating effect of an originally acid secretion upon the genito-urinary mucous membrane, which, from some cause, secretes an excessive quantity of alkaline fluid. He explains the effect of alkaline remedies, in some instances, in removing the alkalinity of the urine, on the supposition that the urine as secreted, being reduced nearly to the neutral condition, is thereby deprived of all irritating properties, and is enabled to pass over the genito-urinary mucous membrane without exciting any alkaline discharge to affect its properties secondarily. The distinction between such cases of alkaline urine and others, is only to be affected by attention to the history and symptoms, and by chemical and microscopical examination of the urine.—*Medical Gazette*, April 7, 1848.

Diseased Conditions of the Mitral Valve.—Incompetency of this valve is generally accompanied by narrowing of the auriculo-ventricular orifice. The valvular lesion under consideration is not unfrequently accompanied by a pseudo-chlorotic state, distinguishable from true chlorosis by the concomitant enlargement of the spleen. In these cases the patients complain of pains in the shoulders, which, according to Jaksch, persist until the system is improved by the use of chalybeates. Jaksch, mentions the cases of three individuals who, from early youth, had labored under this affection of the valves, and in whom the phthisical constitution ultimately became developed. He attempts to explain the presumed connection between these diseases, by supposing defective nutrition, owing to the imperfect manner in which blood is propelled through the aorta.—*Month. Jour. Med. Sci. for May*, from *Hannoverische Annalen*, 1847. *Clinical Notes taken in the Hospital of Prague.*

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Diseased Conditions of the Aortic Valves.—Incompetency of these valves is constantly attended by large arterial pulsation. In simple contraction of the aortic orifice again, while the systole of the heart is of longer duration than in the former case, the pulse is almost always small and filiform. When the heart's action, however, is sufficiently slow to allow a tolerably ample current of blood to flow through the contracted orifice, the pulse may be fuller.—*Ibid.*

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Pericarditis.—It is important to notice that the pains accompanying chest diseases are often referred by the patient to situations inferior, in point of position, to those organs actually affected. This accounts for the frequency of liver affection as a clinical disease, and the rarity of its detection on post-mortem examination. The pains of pericarditis are mostly referred to the scrobiculus cordis or hypochondrium. In one case where Jaksch, misled by these symptoms, diagnozed inflammation of the diaphragm, copious pericarditic effusion was found after death.—*Ibid.*

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Endocarditis.—Depositions in the spleen almost always accompany endocarditis, and these correspond in character with the endocardial exudations, being purulent if the latter are purulent, and so on. Jaksch states, that the endocarditis following acute rheumatism, very frequently gives rise to empyæmia. That the formation of aneurism may sometimes be induced, when the texture of the heart has been weakened by carditis or endocarditis, appears evident from the details of a case, in which inflammatory exudation on the lining membrane of this organ co-existed with inflammatory softening of its whole structure at the apex, and in which, at this point, a considerable degree of attenuation had taken place, which might, no doubt, after some time, have gone on to rupture.—*Ibid.*

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Perforating Ulcer of the Stomach.—Of the patients laboring under this disease, noticed by Jaksch, 33 had acute tubercle of the lungs, 26 chronic tubercle of the lungs, and 43 pneumonia. He therefore presumes that some relation exists between the affection in question and diseases of the lung. The same physician gives the following sketch of the symptoms commonly observed with this kind of ulceration. After intense mental or bodily exertion, or the use of some stimulating liquor or article of food, the patient complains of violent pain, extending upwards from the pit of the stomach, which often disappears after vomiting. The tongue still remains clean, the appetite is variously altered, and the bowels are for the most part obstinately costive. Sometimes the symptoms assume more of the character of those which accompany mucous gastritis. There is a dull, persistent pain in the epigastrium, pyrosis, indigestion, vomiting, and tumefaction of the abdomen. Jaksch, in speaking of the treatment of these cases, recommends the use of milk, veal-soup, and chicken-soup as articles of diet. He also recommends, as palliative remedies,

leeching and counter-irritation of the epigastric region, anodynes, the acetate of lead, and iron.—*Ibid.*

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Dr. Hughes Bennett *on the Treatment of Phthisis Pulmonalis by Cod Liver Oil.*—The effect of the oil in many cases of phthisis is very striking, and is well seen in hospital and dispensary practice. Individuals presenting emaciation, profuse sweats, constant cough and expectoration, as most prominent symptoms, with a degree of weakness that prevents their standing alone, after a few weeks' use of it are enabled to get up with ease and walk about, with a visible improvement in their general health, and an increased amount of flesh. The physical signs of the disease may continue unaffected for some time; but if the treatment be continued, the moist gurgling râles are exchanged for dry blowing sounds, which become more and more persistent, pectoriloquy is merged into bronchophony, the respiration is easier, and a check is evidently given to the ulcerative process, and the formation of purulent matter in the air-passages. In this state, patients often feel themselves so well that they insist on leaving the hospital, or give up their attendance on the dispensary. Dr. Bennett has frequently found it impossible to prevail on such persons to continue the treatment, and the consequence is, that, again returning to their often unhealthy employment and bad diet, and exposed to the other causes favorable to the production of the disease, the distressing symptoms again recur. Several cases with one or more caverns in the lungs, have in this manner returned to the Infirmary from four to seven or eight times during the last six years, and on each occasion have gone out in their own opinion perfectly cured.

Notwithstanding the difficulties which have presented themselves in bringing about a complete cure of the disease, Dr. Bennett has succeeded, in several cases, in ascertaining that caverns have completely healed up, every symptom and physical sign indicating their presence having disappeared, and only slight dulness on percussion, and increased vocal resonance remaining as a proof of the puckering and induration of the pulmonary parenchyma attendant on the cicatrix. He gives two unequivocal cases where this occurred, and alludes to others which he purposes publishing at some future time.

Most cases of phthisis pulmonalis, especially in the advanced stage, are affected with more or less dyspepsia, which renders the stomach irritable, causes total loss of appetite, and is often the cause that prevents nourishment from being taken. In many instances there is no difficulty in employing the oil under these circumstances, but in others it cannot be retained on the stomach. It will then be necessary to calm the irritability of the organ, and the best remedy for this purpose, according to Dr. B.'s experience, is naphtha. It is to the power this substance possesses of checking vomiting, and thereby allowing nourishment to be retained, that he attributes the advantages which have attended its use in the practice of Dr. J. Hastings, and others. The diet should always be nutritive, without being stimulating; and counter-irritation to the chest is an excellent auxiliary. This treatment should be perseveringly persisted in; whilst, to prevent fresh exudations of tubercular matter, an equable temperature is of the highest importance. To equable temperature must be ascribed the advantages of favored localities for phthisis, and with proper precautions it can be very well maintained in this climate.—*Bennett on Cod Liver Oil.* Edinburgh, 1848.

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Cause of Œdema of the Lower Extremities.—In the May No. of the Medical Examiner, is an interesting letter from F. W. Lewis, M. D., written from Paris, in which he details the recent investigations of M. Piedagnel, concerning the cause of the œdema which so frequently occurs in one or both lower extremities, during the progress of phthisis, and other chronic diseases,

that give rise to great emaciation. He attributes the dropsical infiltration, to the positive obstruction of the primitive iliac or femoral veins by direct pressure. Thus in the latter stages of phthisis or other chronic visceral disease, the fat that usually surrounds the vena cava and its primitive branches, becomes absorbed, allowing them to rest directly against the spinal column. This is particularly the case where they pass over the third and fourth lumbar vertebræ. And it is here, that the primitive iliac arteries usually lie directly over or obliquely cross the veins of the same name; and if by the removal of the fat, these latter rest directly against the unyielding vertebræ, they will certainly be more or less obstructed by the pressure of the arteries. The fact that such obstruction does take place under the circumstances named, and is the efficient cause of the partial œdema he fully proves by numerous post-mortem examinations. These examinations also explain why the left limb so much more frequently becomes the seat of dropsy than the right, viz: because the left iliac vein is almost always crossed by the arteries, while the right not unfrequently runs parallel with its corresponding artery, without being crossed by it. M. Piedagnel sometimes found the obstruction in the femoral veins produced by indurated inguinal glands, while the iliac veins were free.

SURGERY.

Ununited Fractures, treated by Subcutaneous Puncture.—Prof. Miller, in May last, read before the Med. & Chir. Society of Eding. (see Month. Jur. Med. Sci., for June,) a paper on this subject—five cases are given illustrative of its value. The operation consists in passing the point of a needle or small tenotomy bistoury, down upon the ends of the bone and freely irritating the surfaces at several points, care being taken not to wound important arteries in the vicinity.

In speaking of the bearings of the cases related, and the different methods which have been resorted to or suggested, Prof. Miller remarks:

As already stated, I am aware that these cases bring no conclusive evidence in favor of the practice in question. They have done enough, and all that is expected of them, if they persuade any of my professional brethren that there is "something in it," and lead them to lend their aid in bringing that to the decision of practical experience.

It is surely better—though somewhat like—the practice of John Hunter; whose treatment of an ununited fracture of the humerus, Mr. Samuel Cooper tells us, was as follows:—"There was an artificial joint, and he made an incision into it: and then, having introduced a *spatula*, he irritated the whole surface of the artificial joint. This brought on considerable inflammation, which ended in anchylosis, and the patient was cured." The subcutaneous puncture and the needle, if they are likely to obtain the same ultimate result, are surely preferable to the incision and the spatula. White's severe operation of cutting down, and sawing off the ends of the bones, was not only hazardous to life, but not unfrequently failed to accomplish the end in view; in some cases it proved fatal. Dr. Physick's seton is less formidable than the saw; but chance of failure with it is not slight; and in fractures of the lower extremity, indeed, its success may be regarded as only the exception to the

general rule. Mr. Amesbury's pressure has not come into vogue; but is rather looked on as painful, irksome, and uncertain. Of Dieffenbach's pegs I have no experience; but I am quite sure that the insertion of them must in most cases prove difficult, and their presence in many dangerous. Lately Mr. Burman has employed galvanism as an exciting agent, and with success, in the case of an ununited fracture of the tibia of fourteen weeks' duration. There were other means at work, however; namely, an improved diet, and constant firm pressure on the fractured ends. It may have been the galvanism alone that moved the plasma and its organization; but many perhaps will be inclined to rank that agent rather as an adjuvant than as a principal. To the method by subcutaneous puncture it might prove a powerful auxiliary. The simultaneous use of both is not incompatible; and, in these days of chloroform, the frequent repetition which either may require, cannot be considered as cruel and objectionable. From neither, conducted with ordinary prudence, can risk of untoward casualty be suspected.

Of course, in no case is local treatment exclusively to occupy our attention. Constitutional management must never be overlooked; and often it proves of the highest importance.

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Surgical Treatment of Solitary Neuromatous Tumors.—In the Dublin Jour. of Med. Sci. for May, 1848, Mr. Adams, (as related in the Proceedings of the Dublin Pathological Society,) has given the particulars of three cases of neuroma, at the close of which he makes the following remarks.

Although we might well imagine that the proper surgical treatment which these *solitary* neuromatous tumors require, was a point of practice long since settled, and that therefore, the cases just adduced, have lost much of the interest which should otherwise attach to them, yet I am of opinion that the multiplication of facts proving the safety and success with which painful neuromatous tumors may be excised, cannot be considered altogether useless, since MM. Louis, Odier, and Warren state, that they have deemed it necessary to amputate limbs affected with this disease. Indeed, if we were not acquainted with the historical evidence of the advantage of excision of neuromatous tumors, and the cutting the nerve from which they spring, or had not witnessed results so happy as those which occurred in the last two cases I have adduced, we could scarcely credit that the operation of completely dividing across such a nerve as the median, or posterior tibial (necessary for the removal of the neuroma), should be followed only by some little temporary inconvenience.

It has now been fully ascertained, by the result of positive experiment on man, that neither loss of sensibility nor of power of voluntary motion ultimately remains, after cutting completely across such nerves as the ulnar, median, musculo-cutaneous, and posterior tibial, and perhaps some others. By such results, we should, I imagine, be encouraged, in the surgical treatment of neuromatous tumours, such as the foregoing, to prefer the cutting across of the nerve, and the excision of the neuroma from which it springs, to any other mode of operation.

We learn, however, that some surgeons have in particular instances considered it more expedient to endeavor to disentangle the neuroma from the branches of the nerve which surround it, than to resort to the complete excision above alluded to.

We read that Velpeau, in a case of a very large neuroma of the sciatic nerve, safely disengaged the tumor from the lash of branches, or fibrillæ, of which this great nerve is made up. He adds, that Chelius of Heidelberg adopted the same plan with similar success. Upon the whole, from what I have seen of those painful neuromatous tumors, I would say the *rule* should be to cut across the nerve above the neuroma, and then remove the tumor; but there may be cases in which it may be practicable, and, perhaps, prudent without

sacrificing the nervous trunk by division, to dissect out the tumor from the nervous fibrillæ which surround it.

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Strangulated Congenital Hernia in an Infant—Operation—Cure.—Mr. Ferguson, in the Dublin Jour. of Med. Sci. for May, 1848, reports a case of strangulated congenital hernia in an infant seventeen days old. The hernia was confined to "the region of the left inguinal canal." The symptoms unequivocal, the operation was performed as the last resort in the usual manner, the relative anatomy normal, and the recovery of the patient perfect. Mr. Ferguson closes his paper with the following remarks:

I have never myself seen the operation for strangulated hernia performed on any patient under the age of puberty, excepting in this instance, and few surgeons have had occasion to use the knife in infants thus affected. Mr. Adams, of Dublin, having operated successfully for strangulated congenital inguinal hernia on an infant eighteen months old, thought the case worthy of being recorded; and states, in his paper on the subject, that the only example of a successful proceeding of the kind which he has found recorded, had happened to Mr. Long in St. Bartholomew's Hospital, in a child only fourteen months of age. Mr. Lawrence has referred to Mr. Long's case, as an instance wherein, at this early age, the hernia was not of the congenital sort, for the tunica vaginalis testis and hernial sac were quite distinct. Mr. Stanley, we are told by Mr. Lawrence, has operated successfully on an infant of seven months,—and here too, the hernia was not congenital. Several other examples are referred to by Mr. Lawrence, in his Treatise on Ruptures, where strangulated hernia had been present in very young subjects, some having died without operation, others having been operated on successfully, and one, a child of six months, having died of profuse diarrhœa in forty-eight hours afterwards. Mr. Curling has politely mentioned two cases to me: one occurred to Mr. Luke, in a child three months old; an operation was performed, the hernia was reduced without opening the sac, and the patient recovered. The other was an instance operated on with success by Mr. Hawkins at St. George's Hospital, at the age of seven weeks. Mr. Lawrence has given some particulars of a case which happened to Dupuytren: an operation was performed on an infant twenty days old, but the result is not mentioned. Among the various professional friends whom I have met recently, I have not found that any of them were acquainted with an instance of an operation having been performed at an age so early as that of the patient whose case I have here recorded.

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Gonorrhœal Ophthalmia.—In his lecture upon syphilitic diseases, lately published in the Lancet, M. Ricord recommends the application of the solid nitrate of silver to the affected surface, so as to produce a white film, but not to destroy the tissues; after which he advises the thorough irrigation of the part, in order to wash off any portion of the salt which may adhere. By this means, he says the secretion is momentarily suspended, but when the crust formed by the caustic falls off, the pus re-appears, though it is then lighter in color and turns sero-sanguineous. "So long," he says, "as little white streaks, the result of the cauterization, remain visible, and so long as the secretion is not again purulent, you may judge that the influence of the nitrate is continuing; but when the streaks have disappeared, and the secretion re-assumes its primary character, you may infer that the effects of your cauterization are over, and you may then repeat it; indeed it can safely be used three times a day." He thinks that mercurial friction in the early stage of the disease rather tends to increase than diminish it. When chemosis ensues, he advises its immediate incision; at the same time he thinks that the cauterization should precede the incision. It is in the early stage of this symptom, and when it is merely the result of œdema, that he thinks most benefit can be derived from it, but

"when the chemosis has reached the phlegmonous state, it can no longer be excised, you must then have recourse to scarifications, but their effects are very inferior to those of excision. In the interval between the cauterization with the solid nitrate of silver, I inject into the eye, three or four times a day a weak solution of the same salt." M. Ricord also depletes largely, both generally and locally. While we agree in the general rules laid down for the treatment of this disease by the distinguished author whom we have just quoted, we confess our dread of rubbing the coats of the eye three or four times a day with the solid nitrate of silver. Upon the subject of the treatment of the urethral discharge, during the continuance of the ocular affection, M. Ricord's observations are worthy of attention. The urethral discharge, he says, no doubt diminishes, but never altogether ceases, when the eye is engaged. He objects to taking pus from another individual in order to reproduce the urethral discharge, because, as he justly says, there may be latent chancres in the urethra which yields the pus, and then an additional misery might be entailed. When the ocular disease has been communicated from the urethral discharge of the same person, he uses copaiba "in order to control the urethritis, as in so doing I remove the chance of relapse as regards the eye." (*Dublin Jour. Med. Sci.*)

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Œdema of the Glottis.—Dr. Jameson, in the Dublin Jour. of Med. Science, for February, 1848, reports thirteen cases of this affection produced by boiling water. The operation of bronchotomy was performed in ten, three of which recovered, and seven died, four of bronchitis and pneumonia, one from the shock of the operation, and one from an accident while on the table. In two cases antiphlogistic treatment was resorted to—one recovered, and one died. Dr. J. makes the following remarks:

In all cases where boiling water has been taken, or attempted to have been taken into the mouth, the danger at all times is imminent; for although the little patients seem to suffer comparatively very little for the first few hours, still symptoms of grave importance set in sooner or later, which, if not combatted by appropriate treatment, will either kill the patient or call for the operation of tracheotomy. The operation is, therefore, I think, imperatively called for, when the usual remedies, such as emetics, leeches, and the application of heat to the surface, &c., fail in allaying the urgent symptoms. But when the breathing becomes stridulous and croupy, or amounting to a mere pant, from spasm of the glottis, the pulse quick and small, the temperature of the body diminished, the head drawn back, face congested, eyes half open, inclination to coma, and difficult deglutition, I should, on the first accession of these symptoms, at once be inclined to operate; but when these have lasted a sufficient length of time to cause complete coma, or if bronchitis or laryngitis has set in, then, I think, it will be found useless; for when patients under such circumstances die after operation, provided it is not produced by the shock inflicted on the nervous system, it is from the accession of bronchitis, laryngitis, or pneumonia; consequently, if any of these exist before we operate, we can entertain but small hopes of recovery.

The following cautions, Dr. J. thinks should be observed in cases where the operation is resorted to:

1st. The operator should bear in mind that his cutaneous incision be in the median line, otherwise the opening into the trachea will not correspond to it, a valvular opening being the result.

2d. Great caution is required in avoiding the thyroid veins, which, as well as the middle thyroid artery, constantly encroach on the median line.

3d. Great caution is required that the incision be not carried too low in the

neck, thereby opening the fascia that is attached to the sternum, which helps to close the upper opening of the thorax, like a lesser diaphragm, whereby there is not only danger of wounding the vena innominata, but also great annoyance may be experienced in the subsequent steps of the operation, by the elevation and depression of the thymus gland.

4th. We should never open the trachea til we are certain that we have laid open the deep fascia that covers it, or we will surely have a valvular opening.

5th. The operator should be prepared, in case of the supervention of spasm, when the trachea is seized by the hook, to cut the piece out rapidly; or should the patient not breathe instantly after this has been done, the surgeon must lose no time in passing a gum elastic catheter into the trachea and inflating the lungs.

6th. We should never enlarge the wound in the soft parts after the trachea has been opened, lest a flow of blood should pass into it, and cause the instant death of the patient.

7th. Blood may pass into the trachea the instant the opening is made into it, thereby producing violent cough, or even to such an amount as to asphyxiate the patient. In either case, the elastic catheter must be had recourse to, and life may be saved.

8th. Should a lymphatic gland present itself along the course of the incision, and tend to obstruct the passage of air into the trachea, it may be removed without danger.

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Guides for Performing Partial Amputations of the Foot. By M. Heurotay. —The author does not consider sufficiently explicit the directions given to find the articulations in the partial amputations of the foot, which were suggested and practised by Chopart and Lisfranc, and he gives the following measurements to guide the operator in these disarticulations:—If the inner border of the foot is measured from the heel to the extremity of the great toe, at a point exactly half-way between the extremities of this line, lies the articulation of the first metatarsal bone with the internal cuneiform. Half-way between this point and the extremity of the great toe, lies the articulation between the first metatarsal bone and the first phalanx of the great toe.

Again, to find Chopart's articulation, a line drawn from the articulation of the internal cuneiform with the first metatarsal bone to the extremity of the heel, is to be divided into three equal parts, and at the junction of the anterior with the middle third, is the point where will be found the articulation of the navicular bone with the astragalus.—*Révue Médico-Chirurgicale.*

[These directions, if correct, will be found useful in performing the partial amputation of the *left* foot, as the operator, standing on the left side of the patient, enters the knife on the inner border of the foot. The guides usually given will, however, be found of more importance in operating on the right foot, in which the incisions are commenced on the outer side. The projection of the head of the fifth metatarsal is here easily felt, and is the guide to the tarso-metatarsal articulation. The articulation through which Chopart's operation is performed, lies half-way between this point and the extremity of the external malleolus.]—*Month. Jour. Med. Sci.*

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Death from the Admission of Air into a Vein in passing a Seton in Front of the Neck.—On Wednesday, March 29th, an inquest was held before the coroner for East Surrey, to investigate the circumstances attending the death of William Richards, aged thirty-nine, a coal porter.

The deceased had applied to Dr. Willis for advice, a fortnight before the day of his death, on account of laryngitis. Leeches were applied, and blisters, and on the morning of his death, the patient came to the house of Dr. Willis for the purpose of having a seton introduced. He was set in a chair, and the skin being pinched up with the finger and thumb, a seton needle, armed with

a strip of lint, was thrust in two inches and a half above the sternum. At the moment of its entrance, Dr. Willis thought he had opened a subcutaneous abscess communicating with the windpipe, as a slight hissing noise was heard. The man instantly became pale and fainted, and then became rigid and convulsed, and it was evident that the hissing noise had proceeded from air having entered a vein. Dr. Cormack from Putney was consulted, and the patient was bled from the arm, which produced temporary amendment; but he died between six and seven hours after the accident.

Mr. Syme, examined at the inquest, concurred in the above opinion as to the nature of the case, and approved of what had been done in the way of treatment. He had examined externally the wound of the seton with reference to the situation of the large vessels, and was satisfied that it was so remote from them, that they could not by possibility be implicated. Dr. Cormack corroborated Dr. Willis' testimony.

The jury returned the following verdict;—"Accidental death from the entrance of air into a vein in the neck during an operation performed by Dr. Willis; but the jury cannot separate without expressing their opinion, that such operation was cautiously and skilfully performed; and, as it appears by the evidence adduced, the said operation was fully warranted by present practice." —*Prov. Med. and Surg. Jour., April* 19.

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Catheterism of the Œsophagus in Cases of Stricture. By M. Trousseau.—This mode of treatment, which was revived by M. Gendron (*Retrospect*, p. 69), is highly recommended also by M. Trousseau, who has seen several cases successfully treated by M. Bretonneau, and publishes two cases from his own practice. He uses a delicate whalebone rod not more than a line in diameter, and from twelve to sixteen inches in length; at either end of this is fixed an olive-shaped dilator, somewhat straitened in the middle, so as to permit of being surrounded by a piece of dry sponge, which is fixed on with sealing-wax, and is made very slightly greater in diameter than the stricture. The sponge is further secured by a thread, the ends of which are left eight inches in length, for a purpose to be presently mentioned. After moistening the sponge with yolk of egg, it is passed beyond the isthmus of the fauces. Traction is then made on the threads, by which means the end of the instrument is made to take the direction of the œsophagus instead of striking the back of the pharynx. So soon as the stricture (which is generally at the level of the larynx) is felt, the instrument is pushed onward, with some force and a rotatory motion, the left hand being used to support the larynx, which would otherwise be pushed down, and would carry the œsophagus with it. It is of importance to pass the obstacle as quickly as possible, otherwise the presence of the foreign body is apt to induce suffocation. When once the passage has been effected, the sponge is again retracted; and this is repeated a second, and perhaps a third time, before finishing the operation. The operations may be repeated twice a-day, gradually increasing the size of the sponge; and, when the passage is so large as readily to admit a sponge of the size of an ordinary bolus of food, the intervals may be much longer. The treatment should be kept up in cases of long standing for several months, or a year; in more recent cases a few weeks are sufficient. M. Trousseau has tried in one case the cauterization by nitrate of silver, as recommended by M. Gendron; but he does not recommend this measure, believing it to be in the œsophagus, as in the case of the urethra, seldom required.—*Révue Médico-Chir.*, March, 1848.

[It is worthy of remark, that almost all the cases of strictured œsophagus in which this mode of treatment has been of service, have been traceable to diphtherite. This may explain the invariably high seat of the stricture. In strictures with loss of substance, as also in many other cases mentioned by Sédillot (*Retrospect*, p. 69), catheterism would be unavailing; and cauterization in such cases would be a very unsafe proceeding.] *Month. Jour. Med. Sci.*

Traumatic Tetanus.—Mr. MacGarvey in the Dublin Jour. of Med. Sci. for Feb. 1848, gives the particulars of a case of tetanus cured by Donovan's tincture of the resin of Indian hemp. The case was one of injury of the "first joint of two fingers of the right hand." Twenty-five drops of the tincture were given every hour for four hours, after which it was given every two hours. On the fourth day it was decreased to ten drops every four hours—recovery was complete on the fifth day.

MIDWIFERY.

Use of Chloroform in Midwifery.—Dr. Edward W. Murphy, of University College, London, has recently published a pamphlet entitled "Chloroform in the Practice of Midwifery," from which we extract the following conclusions:

"1st. It does not interfere with the action of the uterus, unless it be given in very large doses, which is never necessary.

"2d. It causes a greater relaxation in the passages and perinæum; the mucous secretion from the vagina is also increased.

"3d. It subdues the nervous irritation caused by severe pain, and restores nervous energy.

"4th. It secures the patient perfect repose for some hours after her delivery. These three last effects consequently render an operation much easier to perform, and the recovery of the patient afterwards much more favorable.

"5th. The order of its effects on the vital functions seems to be—loss of sensation—partial loss of voluntary motion—loss of consciousness—complete loss of voluntary motion—stertorous respiration—loss of involuntary motion—cessation of the action of the uterus—of respiration—of the action of the heart.

"6th. Its injurious effects, when an ordinary dose is given, seem to depend on constitutional peculiarities, or on improper management. Much excitement about the patient may render her violent. Catalepsy has occurred in some; clonic contractions in others. Some patients are slow in recovering from the effect of a large dose; they remain giddy during the day, and sometimes faint when they stand upright."

Removal of Uterine Polypi. Dr. Hamel, Dr. Mitchell, and Dr. Flumiani.—A woman, aged fifty, still menstruating, was the subject of repeated and severe hemorrhage, which she attributed to the period of life which she had reached, and which was making serious inroads upon her general health. On submitting to a vaginal examination, there was found a very large pediculated fibrous polypus; but it was impossible to determine where the pedicle was attached, on account of the narrowness of the vulva, although M. Hamel had incised the hymen to assist him in his exploration. The size of the tumor was such as to render it impossible to bring it out externally without lacerating the vulva. The pedicle was ligatured by the ordinary serre-nœud, and divided in the course of two days, when the softened polypous mass was removed by aid of tenaculum forceps.—*Gazette Médicale de Paris*, April, 1848, p. 269.

Dr. Mitchell's patient was a lady of delicate constitution, who had borne five children, and who was believed to labor under prolapsus of the uterus. On examination, he found lying in the vagina a globular tumor of the size of an orange, with a pedicle of about one-third the thickness of the polypus, and which was encircled by the mouth of the uterus. By the aid of the speculum the pedicle was ligatured by the double canula of Gooch. It was nine days

before the pedicle was cut through, and during that time the woman suffered severely from hemorrhage, and other distressing symptoms.—*British Record of Obstetric Medicine*, No. I., Jan., 1848.

Dr. Flumiani's patient was forty-two years of age had been several years married, but had had no children. Till she was forty years of age her health was always good; but then, it began to fail, and she was troubled with repeated uterine hemorrhages. At the same time she felt a tumor rising above the pubes, but did not pay much heed to it. At last, she called in the aid of Dr. Flumiani, who found her complaining of obstinacy of the bowels, frequent hemorrhages, incontinence of urine, and various symptoms of general ill health. On examination, he discovered within the uterus a tumor, smooth on the surface, of an egg-shape, and of the size of the head of a mature fœtus. He at once made deep incisions into its substance, to accelerate its breaking down, and, by this means, he also evacuated some blood contained within it. On the following day he returned to complete the operation. The woman was placed on her back, with the pelvis on the edge of the bed, the thighs separated and supported, as in a case of instrumental delivery. The forceps were introduced so as completely to grasp the tumor. It was then dragged down so low that the pedicle could be felt, which was then cut through with scissors, and the polypus removed. The uterus immediately returned to its natural position. No hemorrhage followed; and the woman, previously in a deplorable condition, regained good health.—*Month. Jour. Med. Science, from Annali Universali di Medicina.*

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Observations on the Influence of the Death of the Fœtus in Relation to its Retention in, and Expulsion from, the Uterus.—Prof. Simpson, before the Edinburgh Obstetric Society, (see Monthly Journal Medical Sciences for May, 1848,) deduced the following general laws which regulates the occurrence of labor in relation to the death of the fœtus. 1. That usually, in from one to three weeks after the fœtus died, uterine contractions supervened, and effected its expulsion, but to this very general law there were various exceptions. For, 2. If the embryo died in early embryonic life, and the fœtal appendages continued to live and vegetate, expulsion might not supervene for months. He showed a case of hydatidginous ovum, where the embryo was not larger than an embryo of the sixth week, but the placenta, or rather the chorion, was the seat of hydatidginous hypertrophy and degeneration; and the mother (a patient of Mr. Girdwood's of Falkirk) calculated that she had passed the usual term of utero-gestation, not having menstruated for eleven months previously to the expulsion of this diseased ovum. 3. When the fœtus dies from the third month onwards (in consequence either of disease in its own organization, in its umbilical cord, or in its placenta), and a second twin living fœtus exists at the same time in utero, and this second fœtus continues to grow and keep up a correspondence of development between the organ and its contents, the dead and undeveloped twin may be retained up to the full term of pregnancy, and be then born along with the other living and full-sized child. 4. When the dead fœtus is thus retained, it is preserved free from the decomposition usually following death by all access of air to it being prevented. Sometimes it retains its usually rounded appearance and form if it continues to be surrounded by a sufficient quantity of liquor amnii; but in other cases, where this protecting medium of liquor amnii is defective, the fœtus becomes gradually more and more squeezed between two forces,—viz. the parietes of the uterus on one side of it, and the other living twin or its membranes on the opposite side; and at last, when born, it is found compressed and *flattened* in form. Two such flattened fœtuses are in the University Museum; and many such cases are on record. 5. The birth of such undeveloped dead twins had sometimes given rise to most groundless and erroneous ideas of the existence of superfœtation. 6. Occasionally when one of twins died early in pregnancy, it was after a

time expelled (when it happened to be situated near or over the os uteri:) afterwards the uterus closed, and pregnancy went on to the full time with the remaining living child. He mentioned the case of a lady aborting of a fœtus about the third month, going on in pregnancy to the full time, and then being delivered of twins; having originally conceived of triplets. 7. This last circumstance evidently led to the practical deduction,—that when a dead fœtus in its envelopes was expelled during the currency of pregnancy, and the uterus notwithstanding still remained large and apparently distended, its further contents should not be in any way interfered with; but rest and other means employed to avert the excitement of any additional uterine contraction, under the hope that a living twin might still be retained, and be carried onwards to the full term of utero-gestation.—*Ibid.*

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Intra-uterine Peritonitis in the Fœtus.—Dr. Simpson showed the body of a new-born infant which had died a few days before birth of acute peritonitis, as evidenced by quantities of coagulable lymph effused upon various parts of the surface of the peritoneum, and more particularly on the surfaces of the spleen and liver. Dr. Simpson stated, that, 1st. Acute and fatal peritonitis appeared to be a very common inflammatory disease in the fœtus in the latter months of utero-gestation. 2d. A large number of fœtuses dying in the seventh and eighth month of utero-gestation, presented, as he had found on dissection, well-marked anatomical evidence of it, in the presence of effusions of coagulable lymph, adhesions between the folds of intestines, pus, &c. 3d. The child was sometimes, though rarely, born alive and affected with it. 4th. Far more commonly the child is born dead. and the previous history of the mother shows that it had perished from one to three weeks before its expulsion, its movements having ceased about that time. 5th. Before the child's movements entirely ceased, the mother very generally remarks that its movements are morbid and excessive for fifty or sixty hours previously—probably during the currency of the fatal disease. 6th. Peritonitis is occasionally apt to recur in successive children in the same mother, and seems in some a result and remnant of the syphilitic poison in the parents. 7th. But in most cases its occurrence is independent of syphilis, and occasionally it will not attack successive children in the same mother, or even both children in cases of twins. In an essay on the disease, published some years ago in the Edinburgh *Medical and Surgical Journal*, Vol. I. p. 392, Dr. Simpson has described a case of twins, in which one was born living and healthy; the other was dead, and within the abdomen were found all the usual appearances following intra-uterine peritonitis. Whilst intra-uterine peritonitis was very common, intra-uterine pleuritis was very rare; Dr. Simpson had only seen two well-marked cases of it in the fœtus.—*Ibid.*

—

Interstitial Extra-Uterine Pregnancy.—But few cases of this form of abnormal pregnancy are on record. Dr. Payan, of Aix, mentions the case of a woman aged thirty-two, three months advanced in pregnancy, who was suddenly seized with violent pain in the hypogastric region, burning thirst, extreme prostration and syncope, which terminated in death in a few hours. On making a post-mortem examination, the uterus was found covered with a large quantity of coagulated blood. This organ was not larger than in its unimpregnated state; near its fundus was a prominence, in part diaphanous, which had burst, leaving the embryo and its membranes exposed to view. On opening the uterus, its cavity was found enlarged, and lined by an incompletely organized membrane, but containing no fœtus or blood. The cavity containing the fœtus was formed entirely out of the walls of the uterus near its fundus.

MISCELLANEA.

Mortality of Irish Medical Practitioners.—Drs. Cusack and Stokes, in the Dublin Quarterly Journal of Medical Science for August, 1847, and February, 1848, have drawn the attention of the profession and government to this subject. From these papers we learn that the number of practitioners of medicine in all Ireland is computed in round numbers at 2,700, one-fifteenth of whom have died during the year 1847. Alas how little the community are aware of the devotion and sacrifice of the medical profession on the altar of public weal! We subjoin the following deductions drawn by these gentlemen from their inquiries:

1. That the physicians and surgeons of Ireland are, by their profession, more exposed to the influence of fatal diseases than any other class of the community of a similar grade; and that they are at all times liable to these influences, from the period of their entering the profession as students, to advanced life.
2. That few, if any, of the medical profession in Ireland, escape typhus fever; that many have had it twice, and several three times.
3. That the fevers of the medical men in Ireland are almost always of a bad character, even when the epidemic is not of the worst kind; and that, consequently, fever has proved more fatal to medical men than to any other class of the community of a similar grade in this country.
4. That the fevers and other infectious diseases, from which our profession suffers so severely, are generally contracted in the discharge of public duties, either in attendance upon sanitary institutions, or in the miserable, ill-ventillated and dirty dwellings of the poor.
5. That, according to our returns received for the period prior to 1843,—undoubtedly deficient,—568 out of 1220 practitioners in charge of medical institutions suffered from typhus fever; of these, twenty-eight had fever twice, and nine three times; and that, of the whole number, three hundred, or one-fourth, died.
6. That the calculations contained in the papers which we have now laid before the public show that, of 743 deaths of medical men, of which we possess the particulars, 331 were caused by typhus fever, or 1 in every 2.24;—nearly forty-five per cent. of the whole.
7. That, during the prevalence of the late epidemic, 500 Irish medical men, at the lowest computation, suffered from fever or other epidemic diseases, contracted, for the most part, in discharge of public duties, by which themselves and their families have suffered considerable loss.
8. That about one-fifteenth of the entire medical community of Ireland have died during the year 1847.

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The Eclectic Practitioners, or the so-called Practical Men.—There are medical men in high positions, greatly occupied with numerous patients, who from a want of study, of intelligence, or of time, from a natural indolence, or from being too old to master recent important improvements, affect a supreme disdain for every thing that concerns doctrine or generalization, either physiological or philosophical. They call themselves PRACTICAL men, and speak ironically of *theorists—men of science* or *of the closet*, such who labor most for the advancement of medical science, and whose knowledge crushes and confounds them. These so-called practical men are those who have no doctrine and no general principles, who gather together ready-made formulæ and isolated cases, without any kind of scientific discernment. The only medicine they study is that contained in small books of prescriptions, published in 18mo. or

24mo. which they carry in their pocket, and know by heart. We have frequently had occasion to remark that a practical man, that is, a man who boasts of knowing nothing of scientific medicine, is a medical machine inferior intellectually to a master-mason, a locksmith, or a cabinet-maker, for these have principles and a sort of doctrine which they apply in their business. They were appreciated in like manner by a learned individual whose authority no one could doubt, and who said,—"The true eclectic works without conviction, without principle, without idea. He is continually enlarging his circle, in order to enclose within it facts of the most contradictory nature—they sacrifice in a sort to every god, and create a kind of scientific pantheism, not less fatal to true science than pantheism properly so-called is to true religion."—*Professor Cruveilhier's Address to the Anatomical Society*, 1845.

On the Discovery of a new Fluid for preserving the Color of pathological and anatomical Preparations. By M. H. STAPLETON, M. D., F. R. C. S., M. R. I. A., Surgeon to Jervis-street Hospital.

SIR:—I beg leave to make known to the profession, through the pages of your Journal, the discovery of a solution, which I have employed during the last six years, for preserving pathological specimens. It possesses the important advantages of causing such preparations to retain their color perfectly unchanged, and it does not harden the substance immersed in it. These two results are well instanced in several preparations in Jervis-street Hospital,—in particular preparations of the brain, showing apoplectic clots; apoplexy of the lung, and the recent appearances in stricture of the urethra.

The process I adopt is simply as follows:—In a quart of a saturated solution of alum in water I dissolve half a drachm of nitre; in this fluid I immerse the recent preparation, which soon becomes decolorized, but the color gradually returns within a few days, the period, however, varying in different preparations. When the color is thus completely restored, I put up the preparation in a filtered saturated solution of alum. The specimens are open for inspection

I remain yours, &c. &c.,

16*th January*, 1848. M. H. STAPLETON.

To the Editor of the Dublin Quarterly Journal.

Gutta Percha for Artificial Palate.—A correspondent tells us that he has used gutta percha for an artificial palate with entire success. The substance, after some months' use, has proved to be suitable in all respects. In all cases, when the membrane within the nostrils is too tender to bear the sponge, a plate of gutta percha will answer very well—a very thin plate of it not being softened by the temperature of the mouth. It keeps quite clean. From a mould of the parts, the artificial palate of gutta percha can be formed with great ease, requiring very little time and expense. When bones are coming, or have recently come away, and the parts are tender, this substance, as a temporary instrument, will be useful to the surgeon and his patient; and for the number of poor persons who suffer from congenital and other deficiencies of the palate, (much greater than is usually imagined,) and who are prevented from obtaining relief from a truly distressing condition by the expense of gold and platina palates, this application of the Protean gutta percha will be a boon.

A prepared caoutchouc can be easily and firmly attached to the gutta percha when warm. Our correspondent thinks that a soft palate of the former substance applied to a hard one of the latter, would relieve a very large number of those unhappy persons who suffer from fissures and deficiencies of various kinds.—*Month. Jour. of Med. Sci.*

A. Bushman from South Africa.

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ART. IX.—Principles of Medicine: comprising General Pathology and Therapeutics, etc. By C. J. B. WILLIAMS, M. D., F. R. S. Edited with Additions, by MERIDITH CLYMER, M. D. Third American from the second and enlarged London edition, Philadelphia: Lea & Blanchard. 1848. 8vo., pp. 440. - - - - - - 236

ART. X.—The Influence of Dress in the Production of Disease in Females. By Dr. WILLIAM D. PURPLE, Member of the Medical Society of the State of New-York, &c. [Read before the Chenango County Medical Society, June 10th, 1847.] Albany: Joel Munsel, 1848. 8vo. pp. 11. - 241

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ART XI.—An Account of some of the most important Diseases of Women. By ROBERT GOOCH, M. D. With illustrations. Second edition. Philadelphia: Barrington & Haswell, 8vo. pp. 322. - - - - - - 245

ART. XII.—Medical Chemistry for the use of Students and the Profession: being a Manual of the Science, with its Applications to Toxicology, Physiology, Therapeutics, Hygiene, &c. By D. P. GARDNER, M. D., formerly Professor of Chemistry in the Philadelphia College, and of Chemistry and Natural Philosophy in the Hampden Sydney College, Virginia, Corresponding Member of the Lyceum of Natural History, New-York, etc. etc. Philadelphia: Lea & Blanchard, 1848. 12mo. pp. 396. - - - - 245

ART. XIII.—The half yearly Abstract of the Medical Sciences. Being a Practical and Analytical Digest of the Contents of the Principal British and Continental Medical Works published in the preceding six months. Together with a Series of Critical Reports on the Progress of Medicine and the Collateral Sciences, during the same period. Edited by W. H. RANKING, M. D., Cantab., etc., etc. No. 7. January to June, 1848. Philadelphia: Lindsay & Blakiston. 8vo. pp. 358.

The Retrospect of Practical Medicine and Surgery. Being a Half-yearly Journal, containing a Retrospective View of every Discovery and Practical Improvement in the Medical Sciences. Edited by W. BRAITHWAITE, Surgeon to the Leeds Eye and Ear Infirmary, and Lecturer on Midwifery, and the Diseases of Women and Children, in the Leeds School

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of Medicine. No. 17. January to July, 1848. New-York: Daniel Adee, 1848. 8vo. pp. 355. - - - 246

Wood's Quarterly Retrospect of American and Foreign Practical Medicine and Surgery. No. 5. July, 1848. New-York: R. & G. S. Wood. 8vo. pp. 64. - - - 246

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The advertising sheet belongs to the business department of the Journal, and all communications for it should be addressed to the publisher, under whose exclusive control it is.

TO READERS AND CORRESPONDENTS.

Communications have been received from Professor PIGNÉ, late of Paris, and ROBERT NEWTON, M. D., Medical Staff, U. S. A. Our next will also contain articles from Drs. SHEARMAN, WHITING, BATCHELDER, GREY, and GESCHEIDT.

☞ *Correction.*—In our editorial in the last number, on the "Ancient Monuments of the Mississippi Valley," we inadvertently stated that the authors of this great work were both members of the medical profession. This is a mistake. The latter gentleman named in that notice, only, is a member of our profession. This we are induced to state in justice to the authors of the work—a work which reflects great credit upon all concerned in its production. We hope, in our next number, to be able to give an extensive analysis of its contents, at least so much of it as relates to Medical Science.

On page 210, *line* 6 *from bottom, read* carbonate of ammonia, ℥j, *instead of* ʒj.

Number III. of Vol. 1st, of New Series, will be published on the 1st of November.

The following books, &c. have been received:—

Medical Chemistry, for the use of Students, and the Profession: Being a Manual of the Science, with its applications to Toxicology, Therapeutics, Hygiene, &c. By D. P. GARDNER, M. D., formerly professor of Chemistry in the Philadelphia College; and of Chemistry and Natural Philosophy, in Hampden Sydney College, Virginia; Corresponding Member of the Lyceum of Natural History, New-York, etc. etc. Philadelphia: Lee & Blanchard. 1848. 12mo. pp. 396. (From the Publishers.)

Lectures on the Theory and Practice of Physic. By JOHN BELL, M. D., Member of the American Medical Association, and of the Medical Society of the State of Pennsylvania; Fellow of the College of Physicians, Philadelphia; Member of the American Philosophical Society, and of the Georgofili Society of Florence; and By WILLIAM STOKES, M. D., Lecturer at the Medical School, Park street, Dublin; Physician to Meath Hospital, etc. etc. Fourth edition, revised and enlarged. Philadelphia: Barrington & Haswell. 2 vols. 8vo. pp. 784—976. (From the Publishers.)

A Practical Treatise on the Diseases of Children. By J. FORSYTH MEIGS, M. D., Lecturer on the Diseases of Children, in the Philadelphia Medical Association; Fellow of the College of Physicians of Philadelphia. Philadelphia: Lindsay & Blakiston. 1848. Large 12mo. pp. 575. (From the Publishers.)

A Practical Treatise on Poisons; their Symptoms, Antidotes, and Modes of Treatment. By O. H. COSTILL, M. D. Philadelphia; Grigg, Elliot & Co. 1848. 16mo. pp. 160. (From the Publishers.)

An Account of some of the most important Diseases peculiar to Women. By ROBERT GOOCH, M. D. With illustrations. Second edition. Philadelphia: Barrington & Haswell. 1848. 8vo. pp. 322. (From the Publishers.)

Lead Diseases. A Treatise from the French of L. Tanquerel Des Planches. With notes and additions, on the use of lead pipe and its substitutes. By SAMUEL L. DANA, M. D., LL. D.; Member of the American Academy of Arts and Sciences; Corresponding Member of Boston Society of Natural History; of the Academy of Natural Sciences at Philadelphia; of the National Institute at Washington. Lowell: Daniel Bixby & Co. 1848. pp. 443. (From the Publishers.)

Observations on Surgical Diseases of the Head and Neck. Selected from the Memoirs of the Royal Academy of Surgery of France. Translated and edited By DREWRY OTTLEY. London: Printed for the Sydendam Society. 1848. 8vo. pp. 293.

A System of Clinical Medicine. By ROBERT JAMES GRAVES, M. D., M. R. J. A., one of the Physicians of Meath Hospital, and County of Dublin Infirmary;

formerly Professor of the Institutes of Medicine; Honorary Corresponding Member of the Royal Society of Berlin; the Imperial Medical Society of Vienna; and of the Medico-Chirurgical Societies of Hamburg, Tubingen, Bruges, Montreal, etc. etc. With notes, and a series of Lectures. By W. W. GERHARD, M. D., Lecturer on Clinical Medicine to the University of Pennsylvania; one of the Physicians to the Pennsylvania Hospital, etc. etc. Third American edition. Philadelphia: Barrington & Haswell. 1848. 8vo. pp. 751. (From the Publishers.)

Report on Epidemic Cholera. By C. B. COVENTRY, M. D., Professor of Obstetrics and Medical Jurisprudence in Geneva Medical College, and Professor of Physiology and Medical Jurisprudence in the University of Buffalo. Utica, 1848. 8vo. pp. 13. (From the Author.)

The following Journals have been received in Exchange:

The Medical Examiner and Record of Medical Science, edited by Robert M. Huston, M. D., for July and August. (Monthly. Philadelphia.)

The American Journal of the Medical Sciences, edited by Isaac Hays, M. D., for July. (Quarterly. Philadelphia.)

The American Journal of Insanity, edited by the Officers of the New-York State Lunatic Asylum, for July. (Quarterly. Utica, N. Y.)

The New-Jersey Medical Reporter, and Transactions of the New-Jersey Medical Society, edited by Joseph Parrish, M. D., for July. (Quarterly. Burlington.)

The American Journal of Pharmacy, published by authority of the Philadelphia College of Pharmacy, edited by Joseph Carson, M. D., and Wm. Proctor, Jr. for July. (Quarterly. Philadelphia.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D., and H. W. De Saussure, M. D., for July. (Bi-Monthly. Charleston.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral Sciences, edited by J. Harrison, M. D., and A. Hester, M. D., for July, (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D, for July and August. (Monthly. Augusta.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., and Wm. M. McPheters, M. D. July and August numbers not received. (Monthly. St. Louis.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D., for July and August. (Monthly. Buffalo.)

The North-Western Medical and Surgical Journal, edited by W. B. Herrick, M. D., and J. Evans, M. D., for June. August number not received. (Bi-Monthly. Chicago and Indianapolis.)

The Missouri Medical and Surgical Journal, edited by Thos. Barlow, M. D., and A. J. Coons, M. D. July and August numbers not received. (Monthly. St. Louis.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D., and John P. Harrison, M. D. July and August numbers not received. (Monthly. Cincinnati.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. July and August numbers not received. (Weekly. Boston.)

The Western Journal of Medicine and Surgery, edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D. July and Augustn umbers not received. (Monthly. Louisville.)

The Annalist, a Record of Practical Medicine in the City of New-York, edited by Wm. C. Roberts, M. D., for July and August. (Semi-Monthly. New-York.)

The New-York Dental Recorder, edited by C. C. Allen, M. D., Dentist, for May and June. (Monthly. New-York.)

The Water Cure Era, Devoted to the Explanation of the Principles, Practice, and Philosophy of Hydropathy, edited by Drs. T. P. Abertson, and A. V. Talbert. (July. New-London.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for July and August. (Monthly. Montreal.)

The Half-Yearly Abstract of the Medical Sciences, edited by W. H. Ranking, M. D., for July, 1848. (Half-Yearly. American Edition. London copy not received.)

The Retrospect of Practical Medicine and Surgery, edited by W. Braithwaite, M. D., for July, 1848. (Half-Yearly. American Edition. New-York. London copy not received.)

Dublin Quarterly Journal of Medical Science, edited by ———. August number not yet received. (Quarterly. Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, edited by ———. June and July numbers not yet received. (Monthly. Edinburgh and London.)

London Medical Gazette, or Journal of Practical Medicine, edited by ———, for July and August. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c. &c., edited by Charles Clay, M. D. (Not yet received.)